OST-8554

NP--5901714

DE85 901714

MASTER

Contents

iii
Preface
Remedial Actions Under Superfund v
Alabama (AL) 1
American Samoa (AS). 9
Arizona (AZ) 11
Arkansas (AR). 17
California (CA). 23
Colorado (CO). 43
Commonwealth of the Marianas (CM). 53
Connecticut (CT) 55
Delaware (DE). 61
Florida (FL) 69
Georgia (GA) 99
Guam (GU). 103
Idaho (ID) 105
Illinois (IL). 109
Indiana (IN) 121
Iowa (IA). 139
Kansas (KS). 143
Kentucky (KY). 147
Louisiana (LA) 155
Maine (ME) 161
Maryland (MD). 167
Massachusetts (MA) 171
Michigan (MI). 187
Minnesota (MN) 235
Mississippi (MS) 259
Missouri (MO). 261
Montana (MT) 267
New Hampshire (NH) 273
New Jersey (NJ). 283
New Mexico (NM). 369
New York (NY). 373
North Carolina (NC). 403
North Dakota (ND). 407
Ohio (OH). 409
Oklahoma (OK). 431
Oregon (OR). 435
Pennsylvania (PA). 439
Puerto Rico (PR) 479
Rhode Island (RI). 487
South Carolina (SC). 493
South Dakota (SD). 503
Tennessee (TN) 505
Texas (TX) 511
Trust Territory (TT) 521
Utah (UT). 523
Vermont (VT) 525
Virginia (VA). 527
Washington (WA). 531
West Virginia (WV) 545
Wisconsin (WI) 549
Wyoming (WY) 569

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

951874-3

PREFACE

This document consists of descriptions of the 538 sites on the National Priorities List (NPL). The "Conditions at listing" section describes the site when it was first proposed for the NPL. The "Status" section describes the site at about the time it was placed on the NPL. Subsequent notations are based on a new categorization system EPA instituted in October 1984 to indicate progress at sites. In the past, EPA categorized NPL sites based on the type of response at each site (Fund-financed, enforcement, and/or voluntary action). EPA is now expanding the prior categorization system in two ways: First, Federal enforcement actions are separated from State enforcement actions. Second, the status of site cleanup activities is designated by three new cleanup status codes. The codes identify sites where significant response activities are underway or completed.

Five response categories are used to designate the type of response underway. One or more categories may apply to each site. The five are:

V	Voluntary or Negotiated Response. This category includes sites where private parties have started or completed response actions pursuant to settlement agreements or consent decrees to which EPA or the State is a party.
R	Federal and/or State Response. This category includes sites where EPA or State agencies have started or completed response actions.
F	Federal Enforcement. This category includes sites where the United States has filed a civil complaint (including cost recovery actions) or issued an administrative order. It also includes sites at which a Federal court has mandated some form of response action following a judicial proceeding.
S	State Enforcement. This category includes sites where a State has filed a civil complaint or issued an administrative order. It also includes sites where a State court has mandated some form of response action following a judicial proceeding.
D	Category to be Determined. This category includes all sites not listed in any other category. A wide range of activities may be in progress at sites in this category. EPA or a State may be evaluating the type of response action to undertake, or an enforcement case may be under consideration. Responsible parties may be undertaking cleanup actions that are not covered by a consent decree or an administrative order.

EPA has decided to indicate for informational purposes the status of fund-financed field activities underway or completed, as well as the status where responsible parties are conducting cleanup activities under a consent decree, court order, or administrative order. Remedial planning or engineering studies are not included in these activities.

Many sites are cleaned up in stages or "operable units"—that is, a discrete action taken as part of the entire site cleanup that significantly decreases or eliminates contamination, threat of contamination, or pathway of exposure. One or more operable units may be necessary before EPA will consider the cleanup of a hazardous waste site completed. A simple action such as constructing a fence is not considered an operable unit for coding purposes.

Three cleanup status codes are used. (Only one code can be used at a site because the codes are mutually exclusive.) The three codes are:

I Implementation activities are underway for one or more operable units. Field work is in progress at the site, but no operable units are completed.

O Implementation activities are underway for one or more operable units. Field work is in progress at the site, but no operable units are completed. Implementation activities for one or more (but not all) operable units are completed. Some field work has been completed, but additional work is necessary.

C Implementation activities for all operable units are completed. All actions agreed upon for remedial action at the site have been completed, and work has started to monitor the effectiveness of the cleanup. Further site activities could occur if field conditions change.

REMEDIAL ACTIONS UNDER SUPERFUND

Superfund is a National Trust Fund established by Congress to deal with a major environmental problem. The fund pays for cleaning up when public health or the environment is threatened by hazardous wastes improperly disposed of in the past or by spills of hazardous substances. The Trust Fund is scheduled to get about $1.38 billion from taxes on producers and importers of petroleum and 42 basic chemicals. Another $220 million will come from general Federal revenues—taxpayers' dollars --for a total of $1.6 billion. Authorized by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), the Superfund program is managed by the U.S. Environmental Protection Agency (EPA).

CERCLA defines two types of responses that may be taken when a hazardous substance is released (or threatens to be released) into the environment:

- Removals, emergency-type actions similar to, although broader in scope than, those formerly taken under Section 311 of the Clean Water Act. They must be completed in 6 months or when $1 million has been spent.
- Remedial actions, responses intended to provide permanent solutions at hazardous waste sites. They are generally longer-term and more expensive than removals. A Superfund remedial action can be taken only if a site is on the National Priorities List. After publishing two preliminary lists and proposing a formal list, EPA published the first National Priorities List in September 1983. CERCLA requires that the list be updated at least annually.

The money for conducting a remedial action at a hazardous waste site can come from several sources:

- Superfund can pay for the cleanup.
- The party or parties responsible for the wastes can clean them up voluntarily.
- The responsible party or parties may be forced to clean up by legal action.
- A State or local government can choose to assume the responsibility to clean up without Federal dollars.

A remedial action under Superfund is an orderly process that generally involves the following sequence of activities:

- o Taking any measures needed to stabilize conditions, which involve, for example, fencing the site or removing above-ground drums or bulk tanks. Such measures usually would be required in the later phases of cleanup.
- o Undertaking initial planning activities, which involve collecting all the information needed to develop a coherent strategy and to assist in selecting an appropriate course of action.
- o Conducting remedial planning activities, which involve:
  - — Carrying out a remedial investigation to determine the type and extent of contamination at the site.
  - — Conducting a feasibility study to analyze various cleanup alternatives. The feasibility study is often conducted with the remedial investigation as one project. Typically, the two together cost $800,000 and take from 9 to 18 months to complete.
  - — Selecting the "cost-effective" remedy—that is, the alternative that provides the most protection to human health and the environment at the least cost.
- o Designing the remedy. Typically, the design phase costs $440,000 and takes 6 to 12 months.
- o Implementing the remedy, which might involve, for example, constructing facilities to treat ground water or removing contaminants to a safe disposal area away from the site. The implementation phase typically lasts 6 to 12 months.

The State government can participate in cleaning up a site under Superfund in one of two ways:

- o The State can take the lead role under a Cooperative Agreement, which is much like a grant because Federal dollars are transferred to the State. The State then develops a work plan, schedule, and budget, contracts for any services it needs, and is responsible for making sure that all the conditions in the Cooperative Agreement are met. In contrast to a grant, EPA continues to be substantially involved and monitors the State's progress throughout the project.
- o EPA can take the lead under a Superfund State Contract with the State having an advisory role. EPA, generally using contractor support, manages work early in the planning process. In the later design and implementation (construction) phases, contractors do the work under the supervision of the U.S. Army Corps of Engineers.

Under both arrangements, the State must share in the cost of the implementation phase of cleanup. EPA expects remedial actions to average out at about $12.6 million per site. This includes $4.1 million in operation and maintenance costs over 30 years, the maximum period EPA believes is necessary to ensure that a cleanup meets its goal.

CIBA-GEIGY CORP. (MCINTOSH PLANT)
McIntosh, Alabama

Conditions at listing (September 1983): Ciba-Geigy Corp. produces industrial organic chemicals, pesticides, agricultural chemicals, and synthetic resins on a 1,500-acre site in McIntosh, Alabama, 50 miles north of Mobile. In the past, waste was disposed of in several on-site landfills and an open burning area located on a bluff line on the eastern side of the plant complex. The Tombigbee River and associated fresh water wetlands are situated to the east of the plant within 100 feet of several former waste disposal areas. These wetlands are subject to periodic flooding by the Tombigbee River.

DDT and DDT derivatives have been detected in soils and sediments downgradient of the old burn area, and lindane has been detected in a drinking water well on the site, according to analyses conducted by EPA. This well serves the 1,500 employees of Ciba-Geigy and Olin Corp., which is located just south of Ciba-Geigy. About 2,200 residents of McIntosh receive drinking water from a public well within 3 miles of the plant.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

MOWBRAY ENGINEERING CO.
Greenville, Alabama

Conditions at listing (December 1982): The Mowbray Engineering Co. Site covers about 4 acres in Greenville, Butler County, Alabama. Between 1955 and 1974, the company drained, repaired, and refilled an annual average of 1,000 used electrical transformers, each containing approximately 9 gallons of oil. During this period, the waste oil, which contained PCBs, was discharged through a drainage system into a nearby swamp. Ultimately, drainage discharged into Persimmon Creek, which was used for fishing. In 1974, Mowbray installed a 3,000-gallon underground storage tank and sold the oil between 1974 and 1978. In 1978, Mowbray began to recycle the waste oil. A State investigation of a fish kill in 1975 implicated the company. Since then, several other investigations have been conducted in and near the site. In early 1981, under Section 311 of the Clean Water Act, EPA removed debris and contaminated soil from the site. The total cost was about $130,000. Soil containing below 50 parts per million of PCBs remains on-site.

Status (July 1983): The State is continuing to monitor the site.

Response category / Cleanup status code, October 1984: R / O

OLIN CORP. (MCINTOSH PLANT)
McIntosh, Alabama

Conditions at listing (September 1983): Olin Corp.'s McIntosh Plant is in Washington County near McIntosh, Alabama. The Olin facility, constructed in the early 1950s, originally manufactured chlorine and caustic soda, using the mercury cell process. In 1956, Olin constructed a pesticide and organic chemical plant on the site. In 1981, Olin closed the organic plant and switched from the mercury cell process to the diaphragm cell process. Additional products still manufactured on-site include sodium chlorate, sodium hypochlorite, and sodium chloride.

Olin's past waste disposal practices have contaminated ground water, according to EPA. On-site wells that once provided the plant's drinking water are known to be contaminated. In August 1982, Olin installed a monitoring system of 75 wells. Analyses of samples from some of the wells have detected chromium, lead, mercury and chlorinated aromatic compounds. Nearby wells supply the community of McIntosh and the Ciba-Geigy and Olin plants (1,500 employees). Within 1 mile of the site is a sizable wetlands area. To the east of the site is the Tombigbee River.

Olin is continuing to study the ground water problem and regularly reports to the State.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

PERDIDO GROUND WATER CONTAMINATION
Perdido, Alabama

Conditions at listing (December 1982): The Perdido Ground Water Contamination Site covers about 125 acres in Perdido, Baldwin County, Alabama. No public drinking water is available. In November 1981, Perdido residents began to complain to the State that the water from their wells tasted bad. In February 1982, the State detected benzene in excess of the Federal drinking water standards in several residential wells. Additional sampling confirmed benzene in eight wells. In September 1982, health officials announced that ground water in Perdido was harmful to human health and recommended that people stop drinking their well water if they lived within 1 mile of a 1965 train derailment in which benzene and other chemicals were spilled. The county then arranged for delivery of two mobile drinking water tanks to Perdido.

Status (July 1983): In February 1983, the railroad agreed to fund installation of an alternate water supply for the community.

The State, with help from EPA and the U.S. Centers for Disease Control, is investigating the ground water contamination problem. In addition, EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D / O

STAUFFER CHEMICAL CO. (COLD CREEK PLANT)
Bucks, Alabama

Conditions at listing (September 1983): Stauffer Chemical Co.'s Cold Creek Plant manufactures pesticides in Bucks, Mobile County, Alabama. The facility has operated three on-site landfills for disposal of process wastes, including liquids and solids contaminated with pesticides, solvents, and heavy metals. According to Stauffer, the wastes in the oldest landfill were excavated, placed in drums, and disposed of in the two newer landfills. The exact location of the oldest landfill is unknown. Stauffer reports that the two newer landfills are lined with natural clay and are covered with plastic caps. These landfills are now graded, grassed, and fenced.

Stauffer maintains both upgradient and downgradient monitoring wells at the two newer landfills. Arsenic and lead have been detected downgradient from one of the landfills. No monitoring data are available on nearby surface waters and air.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

STAUFFER CHEMICAL CO. (LEMOYNE PLANT)
Axis, Alabama

Conditions at listing (September 1983): Stauffer Chemical Co.'s LeMoyne Plant began operations in the early 1950s in Axis, Mobile County, Alabama. At first it manufactured carbon disulfide. In 1964, it started to produce chlorine and caustic soda, using the mercury cell process. In 1974, the plant expanded again, producing additional industrial inorganic compounds.

During the 1950s and 1960s, Stauffer used an on-site landfill located east of the manufacturing facility and between the facility and the Mobile River. Stauffer reports that the landfill contains drums of wastes that may include organics, solvents, heavy metals, acids, and bases. The exact quantities and types of wastes are not known. The landfill was constructed in native clay and covered with a 20-mil vinyl plastic cap. Topsoil was spread over the cap, and the area was revegetated and fenced.

Ground water is the sole source of drinking water in this area. About 4,000 people (employees of local industries and residents of Falco) are served by wells within 3 miles of the Lemoyne Plant landfill. Ground water in the vicinity of the landfill is contaminated with lead, chromium, cadmium, chloroform, and carbon tetrachloride, according to analyses conducted by EPA.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

TRIANA/TENNESSEE RIVER
Limestone/Morgan Counties, Alabama

Conditions at listing (October 1981): The Triana/Tennessee River Site is in Limestone and Morgan Counties in Alabama. It consists of Triana, a small town near Huntsville, and 20 miles of the Tennessee River and tributaries. The U.S. Centers for Disease Control has found that Triana residents have been subjected to exceptionally high DDT residues. DDT was manufactured for commercial use by a lessee, Olin Corp., at Redstone Arsenal (RSA) in Huntsville between 1947 and 1970. The manufacturing, handling, and disposal practices at the facility led to the discharge of DDT residues through RSA's drainage system into the Huntsville Spring Branch-Indian Creek tributary system, which enters the Tennessee River at mile 321. An estimated 475 tons of DDT residues accumulated in the sediment of the tributary system. Some fish samples exceed the Food and Drug Administration guidelines of 5 parts per million of DDT for fish sold in interstate commerce. An Army Corps of Engineers study, completed in November 1980, defined the extent of contamination and identified a preferred engineering alternative for long-term control of the DDT contamination of Huntsville Spring Branch, Indian Creek, and adjacent lands and waters.

The Department of Justice, on behalf of EPA has brought a Federal civil action seeking injunctive relief against parties potentially responsible for wastes associated with the site.

This site was once listed under the name "Triana (Redstone Arsenal)."

Status (July 1983): The Federal lawsuit has been successfully completed through a negotiated settlement. On May 31, 1983, the overall settlement was approved by the court and all settlement documents were accepted and filed. The settlement includes a Consent Decree which provides, among other things, that Olin will develop and implement a remedial plan to isolate DDT from humans and the environment. The remedial plan is due to be submitted by June 1, 1984, to a review panel established by the Consent Decree. The panel consists of representatives from EPA (chairperson), TVA, Fish and Wildlife Service, Department of the Army, Alabama Department of Environmental Management, and Olin Corp. The panel will oversee Olin's remedial action until termination of the Consent Decree.

Response category / Cleanup status code, October 1984: V R F

National Priorities List Site **American Samoa (AS)**

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

TAPUTIMU FARM
Island of Tutuila, American Samoa

Conditions at listing (October 1981): The Taputimu Farm Site is on the Island of Tutuila, Trust Territory of American Samoa. The site, part of an agricultural experiment farm owned by the Territory, consists of a warehouse and trailer which have been used in excess of 10 years for storage of chemicals and pesticides. Approximately 4,000 pounds of hazardous wastes are on-site. The chemical storage areas are a short distance from a public beach area, and a primary concern is that these materials could be transported by flood water to the beach 0.3 miles away. Direct human contact and contamination of drinking water and marine resources used for food are of concern.

This is the top priority site in American Samoa.

Status (July 1983): In July 1982, EPA approved $75,000 for studies of four sites --Ordot Landfill, PCB Wastes, PCB Warehouse, and Taputimu Farm -- located on islands of the Insular Territories. Another $65,000 were added in November 1982. The funds are for two separate projects. One is to review and compile existing data for the Ordot Landfill, where ground water and surface water may be threatened by hazardous wastes mixed in with municipal wastes. The funds are for a remedial investigation to determine the type and extent of contamination at each site and a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the third quarter of 1983. The next step, if approved, would be to select the cost-effective remedy and begin design activities. In January 1983, EPA awarded $10,000 to the U.S. Army Corps of Engineers for technical assistance to the project.

Response category / Cleanup status code, October 1984: R / C

INDIAN BEND WASH AREA
Scottsdale-Tempe-Phoenix, Arizona

Conditions at listing (December 1982): The Indian Bend Wash Area encompasses about 12 square miles in parts of Scottsdale, Tempe, and Phoenix, Arizona. Ground water, which supplies more than 350,000 people in the area, is contaminated with trichloroethylene (TCE) and other chlorinated solvents. Six municipal wells have been shut down as a result of the contamination.

Status (July 1983): An Indian Bend Wash Task Force comprised of EPA, State, county, and municipal representatives is seeking to identify the extent, magnitude, and sources of the contamination. EPA is developing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site.

Response category / Cleanup status code, October 1984: F

LITCHFIELD AIRPORT AREA
Goodyear/Avondale, Arizona

Conditions at listing (December 1982): The Litchfield Airport Area Site covers about 42 square miles in the vicinity of the Phoenix-Litchfield Municipal Airport and the cities of Goodyear and Avondale, Arizona. Ground water in the area, which provides drinking water for about 5,000 people, is contaminated with chlorinated solvents.

Status (July 1983): EPA and the State are cooperating in an investigation to identify the extent, magnitude, and sources of the contamination. EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: F

MOUNTAIN VIEW MOBILE HOME ESTATES
Globe, Arizona

Conditions at listing (July 1982): Mountain View Mobile Home Estates is located 75 miles east of Phoenix, in Globe, Arizona. The 17-acre site is divided into 55 lots, 47 of which are occupied by about 130 residents. The subdivision is built on graded chrysotile asbestos tailings around the defunct Metate Asbestos mill, directly adjacent to the active Jaquays Mining & Equipment Corp. asbestos mill.

In January 1980, the Arizona Governor declared a state of emergency at the site and temporarily relocated residents while the site was partially covered and the homes were decontaminated. Wind, water, and human activity have subsequently eroded the 6-inch soil covering, again exposing the asbestos tailings.

This site, once listed under the name "Globe," is the top priority site in Arizona.

Status (July 1983): In April 1983, EPA initiated a remedial investigation/feasibility study (RI/FS) which considered three alternatives for remedial action. The study report, published in May 1983, recommended as the most cost-effective, technically feasible, and environmentally accpetable alternative, the following: permanent relocation of Mountain View residents with subsequent site closure, capping, and maintenance. In June 1983, EPA adopted permanent relocation as the alternative.

During the RI/FS activity, EPA and the Federal Emergency Management Agency offered to temporarily relocate subdivision residents pending a decision on a permanent remedy. Almost all Mountain View residents accepted the offer

Response category / Cleanup status code, October 1984: R F / I

19th AVENUE LANDFILL
Phoenix, Arizona

Conditions at listing (October 1981): The 19th Avenue Landfill covers approximately 125 acres in Phoenix, Arizona, on the northern edge of the Salt River at 19th Avenue. In the past, sand and gravel companies excavated material along a 7-mile stretch of the river to depths of up to 90 feet. Phoenix took over several of these pits for use as waste disposal sites. The 19th Avenue Landfill accepted municipal refuse and unknown quantities of industrial waste, including heavy metals, solvents, and pesticides, from 1954 until 1979. Liquids and sludges were disposed of in temporary impoundments.

Portions of the landfill are within the 100-year floodplain of the Salt River. Early in 1979, the river flooded, raising the water table and filling several pits. The high water also breached several dikes, opening landfill cells and causing refuse to wash into the river, and allowed water to infiltrate directly into the cells, increasing the potential for leachate movement. Studies by the State have shown that leachate is being generated and is contaminating ground water. In addition, saturation of the waste has resulted in the generation of excess amounts of methane gas. Lateral migration of the gas has created a potential explosion hazard in the adjoining community.

A series of court actions initiated by the State against Phoenix in 1979 resulted in consent and court orders requiring the city to install wells to monitor ground water and a system to collect and discharge methane. In addition, the city was required to monitor structures adjacent to the site for gas hazards; study the nature, composition, and volume of hazardous wastes at the site; and permanently close the site.

Status (July 1983): The State continues to monitor the city's progress at the 19th Avenue Landfill. The city has closed the site and installed monitoring wells, a 3-foot cap, a fence, and a methane collection sytem, and plans to install a dike at the river boundary of the landfill. The city has commissioned a consultant to do a site assessment and propose remedial action. The consultant's report is expected in the fall of 1983.

Response category / Cleanup status code, October 1984: S

TUCSON AIRPORT AREA
Tucson, Arizona

Conditions at listing (July 1982): The Tucson Airport Area Site covers about 24 miles in a southwestern section of Tucson in Pima County, Arizona. The site encompasses the Tucson International Airport, Air Force Plant #44, portions of the San Xavier Indian Reservation, and residential areas of South Tucson west of the airport. Ground water at the site is contaminated with organic and metallic compounds, primarily trichloroethylene (TCE) and hexavalent chromium.

The ground water underlying the site is part of the Santa Cruz Basin, the aquifer Tucson uses as its principal source of water. The Tucson area, with a population of 517,000, is one of the largest metropolitan areas in the country that is totally dependent on ground water for its drinking water.

Status (July 1983): A preliminary investigation conducted by EPA, the State, and the city confirmed only one source of contamination: Air Force Plant #44, a missile manufacturing facility owned by the Air Force and operated by Hughes Aircraft.

In negotiations with EPA, the State, and the city, the Air Force agreed to take the necessary actions to clean up the contamination caused by the plant. In the portion of the site north of Los Reales Road, the extent and sources of the contamination are as yet unknown. The State has received $581,000 in CERCLA funds under a Cooperative Agreement with EPA to complete the investigation to identify the extent and sources of the contamination.

Response category / Cleanup status code, October 1984: R

CECIL LINDSEY
Newport, Arkansas

Conditions at listing (December 1982): The Cecil Lindsey Site covers 4.5 acres near Newport, Jackson County, Arkansas. It is a privately-owned and unpermitted operation that received industrial wastes from the mid-1960s to about 1979 or 1980. Drums that previously held pesticides and oils containing heavy metals were disposed of, along with wastes from various metal industries. Previously, the City of Diaz used the site to dispose of municipal wastes.

Leachate from the sandy soils on the site contains heavy metals and organic compounds. Run-off and flooding have the potential to contaminate the shallow aquifer under the site and nearby Village Creek, a tributary to the White River.

Status (July 1983): EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R

FRIT INDUSTRIES (WALNUT RIDGE PLANT)
Walnut Ridge, Arkansas

Conditions at listing (October 1981): Frit Industries manufactures fertilizers from chemical waste materials on about 30 acres in Walnut Ridge, Lawrence County, Arkansas. Operations began in 1973. A fire in 1979 led to run-off contaminated with heavy metals. Operations at the site have caused further run-off problems, possible ground water contamination, and air pollution.

Status (July 1983): Since December 1981, Frit has been studying run-off, the potential for ground water contamination, and the buildup of heavy metals in the sediments of drainage ditches and Coon Creek. The company submits reports to the State and EPA for comment and has proposed a cleanup plan involving a plant for treating run-off.

In February 1983, EPA issued an Administrative Order requiring the company to perform an investigation at the site and conduct any remedial activities necessary.

Response category / Cleanup status code, October 1984: V F / I

GURLEY PIT
Edmondson, Arkansas

Conditions at listing (December 1982): The Gurley Pit covers 3.3 acres 1 mile north of Edmondson in Crittenden County, Arkansas. Between 1970 and early 1976, the site, which was privately owned and operated, was used for disposal of sludges from the refining of waste oil. The sludges are contaminated with chromium and lead and low levels of PCBs. In 1978 and 1979, the pit overflowed into a nearby stream after heavy rains. The State and EPA cleaned up the site under Section 311 of the Clean Water Act. Pit overflow continued to be a potential threat to the area.

Status (July 1983): EPA is planning a remedial investigation/ feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: V R F / O

INDUSTRIAL WASTE CONTROL
Fort Smith, Arkansas

Conditions at listing (December 1982): The Industrial Waste Control Site covers 20 acres 12 miles southeast of Fort Smith, Sebastian County, Arkansas, near Jenny Lind. The site, originally a surface and underground coal mine, is now an abandoned industrial and solid waste landfill and surface impoundment.

From 1970 to 1979, the facility was used to dispose of sludges and liquid wastes primarily from local industries. Contaminants of concern include heavy metals and organics. A threat exists that pollutants will migrate via run-off and subsurface mines. Residents obtain their drinking water primarily from private wells. An overflow in 1977, allegedly killing livestock and fish, ultimately led to the site closing in 1979.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. The next step would be a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: F

MID-SOUTH WOOD PRODUCTS
Mena, Arkansas

Conditions at listing (October 1981): Mid-South Wood Products processes wood on a 57-acre site in Mena, Polk County, Arkansas. The company purchased the property in 1978. Wood-processing operations conducted from 1967 to 1977 by the former owner contaminated surface waters with pentachlorophenol, creosote, arsenic, and chromium. There is a strong possibility of subsurface contamination.

Status (July 1983): The potentially responsible parties, under an agreement with the State, are taking short-term remedial measures at the site. EPA is considering a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: F

VERTAC, INC.
Jacksonville, Arkansas

Conditions at listing (October 1981): The Vertac, Inc., Site covers 92 acres in Jacksonville, Arkansas. Since the late 1940s, insecticides and herbicides have been manufactured at the site. As a result of inadequate waste disposal methods and production controls, soil, surface water, and ground water have been contaminated by insecticides, herbicides, chlorinated phenols, and dioxin.

In 1980, the Department of Justice (DOJ), on behalf of EPA, brought a Federal civil action seeking injunctive relief against Vertac, which now owns and operates the site, and Hercules, Inc., the former owner. The State also filed against the two companies, and the cases were consolidated. In April 1980, a hearing on a preliminary injunction resulted in Vertac being required to (1) drain and cover a contaminated basin, (2) treat the drained liquids, (3) install a cut-off wall and drain around the basin, and (4) complete the capping of all disposal areas. This work was completed in the summer of 1981.

Status (July 1983): To address remaining contamination problems that could not be addressed in the preliminary injunction or that required further study, EPA, the State, and DOJ negotiated a Consent Decree with Vertac which became effective in early 1982. It required Vertac to provide a consultant's study of on-site conditions, a proposal for on-site remedial work, a study of off-site conditions, a study of Lake Dupree (a nearby lake contaminated with dioxin), and a plan for on-site waste management.

Response category / Cleanup status code, October 1984: V F / I

AEROJECT GENERAL CORP.
Rancho Cordova, California

Conditions at listing (October 1981): The Aerojet General Corp. Site covers 8,500 acres in the eastern portion of Sacramento County, California, adjacent to the Rancho Cordova area (population 40,000). The northeast edge of the site is approximately 0.5 miles from the American River. Underlying the site are extensive (50-foot deep) gold dredge tailings, a remnant of past mining operations. The upper aquifer is 80 feet below the surface. Ground water is used extensively throughout the Rancho Cordova area to supply municipal, domestic, and industrial water.

Since 1953, Aerojet and its subsidiaries have disposed of, on-site, unknown quantities of hazardous waste, including trichloroethylene, tetrachloroethylene, chloroform, Freon, and other chemicals associated with rocket propellants, and various chemical processing wastes. Soil on-site is contaminated. Monitoring data show extensive ground water contamination on- and off-site, primarily with trichloroethylene. In April 1979, Aerojet and its subsidiaries started ground water studies to examine the impact of past disposal practices and to determine the requirements for cleanup.

In December 1979, the State filed suit against Aerojet and a subsidiary, Cordova Chemical.

Status (July 1983): EPA has worked with the State since 1979, providing technical assistance through the Emergency Response Team, the Las Vegas lab, and Region IX. In March 1982, the State requested EPA's assistance in evaluating Aerojet's "Proposal for a Ground Water Quality Control Program." EPA found major technical problems in Aerojet's proposal. In the past, a confidentiality agreement between Aerojet and the State limited EPA access to the documents that would allow EPA to independently assess the company's progress toward cleanup. The agreement is no longer in effect.

On Feb. 25, 1983, Region IX requested information from Aerojet regarding soil and ground water contamination. EPA will soon complete review of the documents received in response.

Response category / Cleanup status code, October 1984: S

ATLAS ASBESTOS MINE
Fresno County, California

Conditions at listing (September 1983): The Atlas Asbestos Mine operated from 1963 to 1980 on a 16-acre site about 19 miles northwest of Coalinga, Fresno County, California. The abandoned site consists of the asbestos mine, a processing mill, support buildings, and extensive asbestos tailings. Drainage from the site is directly downslope into White Creek, then into the Los Gatos Creek. Los Gatos Creek is a tributary to the Arroyo Pasajero, a flood area along the California Aqueduct. During the rainy season, the California State Department of Water Resources drains the Arroyo into the aqueduct. Analysis of water in the aqueduct, conducted by the Southern California Metropolitan Water District and the Department of Water Resources, indicates high concentrations of asbestos fibers.

Status (June 1984): EPA has conducted initial planning activities for this site. The purpose was to gather and review existing data on the site, define areas of insufficient data, and define the scope of any remedial investigation. The plan also examined what remedial actions would be necessary to respond to the release or substantial threat of release of asbestos into the environment. Remedial investigation activities are being formulated and are expected to begin soon.

Response category / Cleanup status code, October 1984: D

CELTOR CHEMICAL WORKS
Hoopa, California

Conditions at listing (December 1982): The Celtor Chemical Works Site covers about 2 acres in Hoopa, within the Hoopa Valley Indian Reservation in the forested mountains in Humboldt County in northern California. The Trinity River, which supports the only fish resources for the Hoopa Indians, flows through the center of the reservation and near the site. Land in the vicinity of Celtor is used for agriculture, residential areas, and industrial/commercial enterprises.

From 1957 until 1962, copper, zinc, and precious metals were recovered on-site from sulfide ore mined and trucked to Celtor from nearby Copper Bluff Mine. Significant levels of cadmium, lead, arsenic, mercury, zinc, and copper have been found at the site, which children on the reservation now use as a play area.

Status (July 1983): EPA is investigating the site further to gather the information needed to start a feasibility study, which will identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R / O

COALINGA ASBESTOS MINE
Fresno County, California

Conditions at listing (September 1983): The Coalinga Asbestos Mine operated from 1963 to 1978 on a 3-acre site about 17 miles northwest of Coalinga, Fresno County, California. The abandoned site consists of the asbestos mine, a processing mill, support buildings, and asbestos tailings. Pine Canyon Creek drains the site into Los Gatos Creek, a tributary to the Arroyo Pasajero, a flood area along the California Aqueduct. During the rainy season, the California State Department of Water Resources drains the Arroyo into the aqueduct. Analysis of the water in the aqueduct, conducted by the Southern California Metropolitan Water District and the Department of Water Resources, indicates high concentrations of asbestos fibers.

Status (June 1984): EPA has conducted remedial planning activities for this site. The purpose was to review the scope of a remedial action plan being proposed by the owner of the site, define areas of insufficient data, and review the proposed remedial action for consistency with the National Contingency Plan. EPA and the Regional Water Quality Board are continuing review of the proposed remedial action plan.

Response category / Cleanup status code, October 1984: D

COAST WOOD PRESERVING
Ukiah, California

Conditions at listing (December 1982): Coast Wood Preserving operates a wood-treating facility on a 7.5-acre site 2 miles south of Ukiah in northern California. Portions of the site are located over two streams at a point 0.5 miles upstream of where they meet the Russian River. The river supplies municipal, domestic, and agricultural water. The area is a ground water recharge zone. The ground water supplies domestic, agricultural, and industrial water.

As a result of past handling and storing practices, inorganic chemicals have contaminated soil, ground water, and surface water. A study conducted by Coast Wood found elevated concentrations of chromium, arsenic, and copper in ground water. Soil and sediment also contain elevated levels of chromium, arsenic, and copper.

The State has taken several enforcement actions against the company. Most recently, in May 1981, the State issued a Cease and Desist Order (CDO) requiring the company to establish a time schedule and interim steps to stop releases of toxic waste to ground water and surface water. In September 1981, the case was referred to the State Attorney General when the company violated the CDO. In December 1981, Mendocino County Superior Court issued a Stipulation for Preliminary Injunction against the company.

Status (July 1983): At present, the company is continuing its investigation to determine the full extent of ground water contamination. Concurrently, the company is pumping out the contaminated plume and is storing it on site until a final method of treatment and disposal has been determined.

Response category / Cleanup status code, October 1984: S

DEL NORTE COUNTY PESTICIDE STORAGE AREA
Crescent City, California

Conditions at listing (September 1983): The County of Del Norte owns land south of the county airport approximately 1 mile northwest of Crescent City, California. Portions of the land are occupied by county office buildings. In the early 1970s, an area about 150 by 200 feet was fenced to provide a collection site for a coordinated county-wide program for the interim storage of empty pesticide drums. The drums had contained pesticides, including dichloropropenes, dichloropropanes, 2,4-D, and 2,4,5-T. The county removed about 1,500 drums in January 1982. Sampling by the State has confirmed the presence of 1,2-dichloropropane, 2,4-D, and 2,4,5-T in the ground water at levels that equal or exceed the suggested maximum contaminant levels for these compounds. To date, there has been no evidence that off-site residential wells have been contaminated.

Status (June 1984): EPA is conducting a remedial investigation/feasibility study to determine the nature, cause, and extent of contamination at the site and to identify alternatives for remedial actions.

Response category / Cleanup status code, October 1984: R

IRON MOUNTAIN MINE
Redding, California

Conditions at listing (October 1981): Iron Mountain Mine is a privately-owned site in the Klamath Mountains of Shasta County, 9 miles northwest of Redding, California. The mine area, which encompasses about 2,000 acres, is drained by Boulder Creek and Slickrock Creek, both tributaries to Spring Creek. Spring Creek drains into Keswick Reservoir. Flat Creek, which also drains a portion of the site, enters Keswick Reservoir just upstream of Spring Creek. Keswick Reservoir was formed by the construction of Keswich Dam on the Sacramento River, which is a major source of Redding's drinking water. The State has estimated that a daily average of 2,350 pounds of zinc, 300 pounds of copper, and 50 pounds of cadmium are carried into Keswick Reservoir from the site.

Status (July 1983): In February 1982, the State brought action against the present owner of the site. The action resulted in a default judgment against the company and fines totalling $16.8 million. In June and July 1982, the company filed motions to vacate the default judgments, which the Shasta County Superior Court denied. In August 1982, the company filed an appeal from the denials on its motion. One appeal is still pending. The company has reached a settlement with the State on the $16.8 million default judgment. CERCLA funding is being requested for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R

JIBBOOM JUNKYARD
Sacramento, California

Conditions at listing (December 1982): The Jibboom Junkyard covers 9 acres in Sacramento, California, on the floodplain of the Sacramento River. A metal-salvaging business operated on the site. Among other things, the company dismantled transformers and possibly asbestos-lined boilers. The original size of the site is unknown, but it may once have covered about 35 acres. Portions of the original site are now occupied by motels and/or are a part of Interstate Freeway I-5.

Soil sampling by the State in 1981 detected levels of heavy metals exceeding the State's Total Threshold Limit Concentrations. There were also indications of PCB contamination. The soil is highly permeable, and the aquifer is 35 feet below the surface. The city's drinking water is taken from the river at the northwest corner of the site. The river is also used for recreation and irrigation.

Status (July 1983): In April 1983, EPA collected soil samples, and in May 1983 the State fenced the site to limit public access. In June 1983, deep core samples were collected to further determine the extent and nature of contamination on the site.

Response category / Cleanup status code, October 1984: R

KOPPERS CO., INC. (OROVILLE PLANT)
Oroville, California

Conditions at listing (September 1983): Koppers Co., Inc., preserves wood with chemical solutions on a 40-acre site in Oroville, Butte County, California. The facility is partially situated on dredge tailings. Both shallow and deep aquifers exist below the site and are connected. According to analyses done by the Central Valley Regional Water Quality Control Board, the shallow aquifer is contaminated with pentachlorophenol (PCP), isopropyl ether, various polynuclear aromatics, copper, chromium, and arsenic, all of which Koppers uses or has used in its processes. The Koppers facility has been contaminated by chemicals spilled during treatment or storage of lumber over unpaved areas, as well as leakage from underground piping. In September 1982, the State issued a Cease and Desist Order. Working with the State, Koppers prepared a workplan, which identified the contaminated areas of the plant and proposed actions to clean them up.

Status (June 1984): In January 1984, PCP contamination was discovered in nearby residential drinking water supply wells. Preliminary sampling indicates that this contamination may be a result of off-site migration. Koppers is currently supplying the affected residents with bottled water and is formulating a sampling plan to further characterize the extent of contamination. When the extent and causes of contamination are defined, the State and Koppers will begin negotiations on the remedial action plan.

Response category / Cleanup status code, October 1984: S

LIQUID GOLD OIL CORP.
Richmond, California

Conditions at listing (December 1982): The Liquid Gold Oil Corp. Site covers 17 acres of filled marshland within the City of Richmond, California. Liquid Gold was registered with the State of California as a "waste oil pickup" business. It purchased used oil and resold it for uses such as fuel, lubricating oil, and dust control. Several deteriorating buildings and 27 storage tanks of various sizes are on about 2 acres. Oily wastes found on the ground, as well as liquid wastes stored in the tanks, contain lead, chromium, nickel, and phenols. The site is within 1,000 feet of the San Francisco Bay and overlies shallow ground water, which has no known beneficial uses at present.

Status (July 1983): The site has been the subject of numerous State enforcement actions, and Liquid Gold has ceased operations at this location. The State is working with the landowner, Southern Pacific Transportation Co., to clean up the Liquid Gold facility. In May 1983, Southern Pacific completed removing the storage tanks and their contents from the facility. The State expects to receive a cleanup plan from Southern Pacific in August 1983.

Response category / Cleanup status code, October 1984: S

MCCOLL
Fullerton, California

Conditions at listing (December 1982): The McColl Site is an inactive waste disposal facility covering 8 acres in Fullerton, Orange County, California. The site consists of two distinct areas: (1) the Ramparts, which is in the eastern portion of the site and is surrounded by developed property and residences and (2) the Los Coyotes Area, which is in the western portion and underlies a part of the Los Coyotes Country Club Golf Course.

About 200,000 cubic yards of wastes, primarily oil refinery acid sludge and oil field drilling muds, are on-site. The sludge was placed in sumps and covered with drilling muds and other fill materials. The major portion of wastes is acidic and contains sulfur and organic chemicals. The wastes have reacted to produce a mixture of complex organic and sulfur-containing compounds, some of which are gases. The odors from some of the gases are easily detected by nearby residents. There is a potential for direct contact with the wastes and for contamination of surface water and ground water.

In October 1981, EPA, the State, and potentially responsible parties agreed on a three-phase cleanup plan: Phase I, a complete site investigation; Phase II, a development and evaluation of remedial alternatives; and Phase III, cleanup of the site. Phases I and II have been completed, and excavation of the site has been determined to be the most cost-effective remedy.

Status (July 1983): Phase III is scheduled to begin in October 1983. The State and EPA are entering into negotiations with potentially responsible parties to compel them to pay for or participate in the remedial action. If negotiations are not successful or timely, the State plans to apply for Federal funding and enter into a Cooperative Agreement with EPA.

Response category / Cleanup status code, October 1984: R F / I

MGM BRAKES
Cloverdale, California

Conditions at listing (December 1982): The MGM Brakes Site covers 8 acres at the southern edge of Cloverdale, California, and is surrounded by residential, industrial, commercial, and agricultural areas. It is primarily a privately owned brake assembly and casting plant.

In the past, this facility operated casting machines that used hydraulic fluids containing PCBs. When casting operations started, leakage from the machines collected and discharged onto an open field at the south end of the plant. This method of waste handling continued until August 1981, when the State directed the facility to discontinue the discharge and clean up the site. Hazardous concentrations of PCBs were found in the open field and inside the casting plant. Run-off from the site drains into Icaria Creek, a tributary to the Russian River. About 1 mile from the site, the river supplies drinking water to Marin and Sonoma Counties. River water is also used for agricultural purposes. The facility overlies a shallow aquifer 8 to 25 feet below the surface.

In August 1981, following a State order, MGM Brakes began removal of soil contaminated with oil from the field adjacent to the casting building. Before disposing of the soil, the transporter tested it and found that it contained PCBs. Following the discovery, the casting building was found to be contaminated with PCBs. MGM Brakes cleaned up the plant building in early 1982. A study by MGM Brakes determined that PCBs were in the soil to a depth of 20 feet. An estimated 3,000 cubic yards of soil are contaminated. Usable ground water in the vicinity of the site is free of contamination at present.

Status (July 1983): With these studies now complete, the State and MGM Brakes are nearing agreement on the terms of a final cleanup plan at the site.

Response category / Cleanup status code, October 1984: S

PURITY OIL SALES, INC.
Malaga, California

Conditions at listing (December 1982): The Purity Oil Sales, Inc., Site covers 6 acres in an industrial-residential area 2 miles south of Fresno in Malaga, Fresno County, California. To the north is a mobile home park, scrap metal recycling/reclaiming facility, and a combination service station, market and coffee shop. An irrigation canal is to the south, Santa Fe Railroad to the west, and South Maple Avenue to the east. The Fresno Aquifer, about 30 feet below the surface, provides water for municipal, industrial, and agricultural purposes, as well as for a number of private wells. The area is also a ground water recharge zone.

Oily liquids and sludges have been disposed of on-site for many years. Some liquid wastes remain in a concrete pond. Former sludge disposal ponds have been filled with construction debris. Soil samples contain significant concentrations of PCBs, lead, copper, zinc, and various volatile organics. An unknown sludge-like substance is oozing from the filled area and has, in places, entered adjacent properties. The site was closed in 1974. All buildings were removed, and the site was fenced.

Status (July 1983): The State has requested CERCLA funding for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R

SAN GABRIEL VALLEY (AREA 1)
El Monte, California

Conditions at listing (September 1983): San Gabriel Valley (Area 1) is a ground water plume that runs along the axis of the Rio Hondo Wash and the Salt Pit Wash in the San Gabriel ground water basin in El Monte, Los Angeles County, California. The plume also parallels the San Gabriel River to the east. It is approximately 4 miles long and 1.5 miles wide.

Ground water is contaminated with trichloroethylene (TCE), perchloroethylene (PCE), and carbon tetrachloride (CTC) according to analyses by State agencies and local water companies. Many public wells in this area exceed the EPA Suggested No Adverse Response Levels (SNARL) for TCE and PCE. Approximately 200,000 people are affected. Cities and public water companies in the area have tested to ensure that their water supplies contain less than 5 parts per billion (ppb) of TCE and 4 ppb PCE, levels considered safe for human consumption. When alternative methods of reducing the TCE and PCE levels below such levels are not effective, wells are removed from service.

Currently, three small mutual water companies have no alternate water supply and have advised their customers to use bottled water.

Status (June 1984): As a result of EPA's analysis of initial remedial measures, completed in December 1983, EPA will install water treatment systems to provide clean water to two of the three companies that have no alternate supply. The third company has already purchased a treatment system and will begin operation of the system soon.

A supplemental sampling program of contaminated wells will begin soon to get a "snapshot" view of the degree of contamination. The State Department of Health Services and EPA are preparing to initiate a remedial investigation/feasibility study to determine the aerial and vertical extent of contamination and to develop alternatives for treatment and management of the problem.

EPA continues its investigation to identify sources of contamination.

This site, along with the three other San Gabriel Valley sites, was added to the NPL in May 1984 because it involves a serious problem that required taking immediate remedial action.

Response category / Cleanup status code, October 1984: R / I

SAN GABRIEL VALLEY (AREA 2)
Baldwin Park, California

Conditions at listing (September 1983): San Gabriel Valley (Area 2) is a ground water plume that parallels the San Gabriel River to the west in the San Gabriel ground water basin in the Baldwin Park area of Los Angeles County, California. The plume is about 7.5 miles long and 1.5 miles wide.

Ground water is contaminated with trichloroethylene (TCE), perchloroethylene (PCE), and carbon tetrachloride, according to analyses by State agencies and local water companies. Many public wells in the area exceed the EPA Suggested No Adverse Response Levels (SNARL) for TCE and PCE. Approximately 100,000 people are affected. Cities and public water companies in the area have tested to ensure that their water supplies contain less than 5 parts per billion (ppb) of TCE, a level considered safe for human consumption. When alternative methods of reducing the TCE level below 5 ppb are not effective, wells are removed from service.

Status (June 1984): A supplemental sampling program of contaminated wells will begin soon to get a "snapshot" view of the degree of contamination. The State Department of Health Services and EPA are preparing to initiate a remedial investigation/feasibility study to determine the aerial and vertical extent of contamination and to develop alternatives for treatment and management of the problem.

EPA continues its investigation to identify sources of the contamination.

This site, along with the three other San Gabriel Valley sites, was added to the NPL in May 1984 because it involves a serious problem that required taking immediate remedial action.

Response category / Cleanup status code, October 1984: R

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SAN GABRIEL VALLEY (AREA 3)
Alhambra, California

Conditions at listing (September 1983): San Gabriel Valley (Area 3) is a ground water plume that runs along the axis of the west fork of the Alhambra Creek in the San Gabriel ground water basin in Alhambra, Los Angeles County, California. The plume is about 2 miles long and 1 mile wide.

Ground water is contaminated with trichloroethylene (TCE) and perch loro ethylene (PCE), according to analyses by State agencies and local water companies. Many public wells in the area exceed the EPA Suggested No Adverse Response Levels (SNARL) for TCE and PCE. Approximately 100,000 people are affected. Cities and public water companies in the area have tested to ensure that their water supplies contain less than 5 parts billion (ppb) of TCE, a level considered safe for human consumption. When alternative methods of reducing the TCE level below 5 ppb are not effective, wells are removed from service.

Status (June 1984): A supplemental sampling program of contaminated wells will begin soon to get a "snapshot" view of the degree of contamination. The State Department of Health Services and EPA are preparing to initiate a remedial investigation/feasibility study to determine the aerial and vertical extent of contamination and to develop alternatives for treatment and management of the problem.

EPA continues its investigation to identify sources of the contamination.

This site, along with the three other San Gabriel Valley sites, was added to the NPL in May 1984 because it involves a serious problem that required taking immediate remedial action.

Response category / Cleanup status code, October 1984: R

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SAN GABRIEL VALLEY (AREA 4)
La Puente, California

Conditions at listing (September 1983): San Gabriel Valley (Area 4) is a ground water plume that runs along the axis of the San Jose Creek in the San Gabriel ground water basin in La Puenta, Los Angeles County, California. The plume is about 1 mile long and 1 mile wide.

Ground water is contaminated with trichloroethylene (TCE) and perchloroethylene (PCE), according to analyses by State agencies and local water companies. Many public wells in the area exceed the EPA Suggested No Adverse Response Levels (SNARL) for TCE and PCE. Approximately 100,000 people are affected. Cities and public water companies in the area have tested to ensure that their water supplies contain less than 5 parts per billion (ppb) of TCE, a level considered safe for human consumption. When alternative methods of reducing the TCE level below 5 ppb are not effective, wells are removed from service.

Status (June 1984): A supplemental sampling program of contaminated wells will begin soon to get a "snapshot" view of the degree of contamination. The State Department of Health Services and EPA are preparing to initiate a remedial investigation/feasibility study to determine the aerial and vertical extent of contamination and to develop alternatives for treatment and management of the problem.

EPA continues its investigation to identify sources of the contamination.

This site, along with the three other San Gabriel Valley sites, was added to the NPL in May 1984 because it involves a serious problem that required taking immediate remedial action.

Response category / Cleanup status code, October 1984: R

SELMA TREATING CO.
Selma, California

Conditions at listing (December 1982): The Selma Treating Co. Site covers 12 acres about 0.5 miles south of Selma, Fresno County, California. The site is in an area of single family residences, light industry, and agriculture. Wood-treating operations began at the site in 1936. Pressure treating began in 1965. Process wastes were discharged into an off-site drainage ditch, several on-site disposal wells, and an unlined pond. Preservative from treated wood and treatment vessels was dripped and spilled in numerous areas on-site, and sludge scraped from tanks was placed in piles on-site. The owner of the company filed a bankruptcy action in 1981. A new facility owner, Sawmill Properties, Inc., resumed partial operation in 1982.

Sampling indicates elevated levels of copper, chromium, arsenic, and pentachlorophenol in soil and ground water, both on- and off-site. At 25 to 30 feet below the surface is an aquifer that is the sole source of water in the area. The site is also in a ground water recharge zone.

In February 1981, EPA sent a letter (under Section 3007 of the Resource Conservation and Recovery Act) to the owner requesting that the company (1) identify hazardous wastes generated, treated, or disposed of, (2) identify products used, (3) describe operating processes, (4) provide maps, and (5) provide any proposals for remedial measures. In March and May 1981, the company responded with the information requested. In September 1981, the State issued a Cleanup and Abatement Order to the company. In November 1982, Selma Leasing Co, the owner of the land, proposed a site monitoring plan.

Status (July 1983): Results of the owner's monitoring plan are expected in July 1983.

Response category / Cleanup status code, October 1984: S

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

STRINGFELLOW
Glen Avon Heights, California

Conditions at listing (October 1981): The Stringfellow Site covers 22 acres in a canyon near Glen Avon Heights in southern California. From August 1956 to November 1972, an estimated 34 million gallons of liquid wastes (spent acid, organics, and heavy metals) were dumped into surface impoundments. Heavy rainfall in the past has led to the release of hazardous wastes into the environment. Both surface water and ground water are contaminated. In December 1980, the site reverted to the State for failure to pay back taxes.

Early in 1980, EPA's Regional Response Team directed the removal of over 10 million gallons of wastes from the site. About $828,000, authorized under Section 311 of the Clean Water Act, was spent to transport wastes, reinforce containment barriers, and repair the truck-loading areas. In 1981, the State undertook a program of temporary construction to stabilize the site. EPA assisted by awarding a $95,000 Cooperative Agreement (using funds under the Resource Conservation and Recovery Act) to California for design work and additional analyses. After completion of the design, the State began another temporary construction program involving leachate controls, drainage controls, waste neutralization, and site grading and capping. Leachate is being hauled to an off-site facility for disposal.

This is the top priority site in California.

Status (July 1983): On April 18, 1983, a draft Cooperative Agreement was received at EPA Headquarters. The agreement requested reimbursement for past State expenditures at the site, a remedial investigation and feasibility study, initial remedial measures for fencing and controlling erosion, and continued hauling of leachate to an off-site disposal facility.

On April 21, 1983, the Department of Justice, on behalf of EPA, joined with the State to file a suit in U.S. District Court against 31 parties responsible for wastes associated with the site.

In April and May 1983, both EPA and the State took emergency measures to maintain site integrity. These include temporary fencing, installation of a french drain, sampling, and other interim control measures.

Response category / Cleanup status code, October 1984: R F / O

BRODERICK WOOD PRODUCTS
Denver, Colorado

Conditions at listing (September 1983): Broderick Wood Products occupies 64 acres in an industrial section of Denver, Colorado. It operated from 1946 to 1981, using pentachlorophenol and creosote to treat and preserve wood. Wastes were disposed of primarily in two lagoons.

EPA has documented contamination of soils, ground water, and surface water. Recent data show that the ground water north of the facility contains at least 10,000 micrograms per liter of pentachlorophenol, making it unsafe for human consumption. An unlined irrigation ditch along the northern boundary of the site shows trace levels of pentachlorophenol.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: R

CALIFORNIA GULCH
Leadville, Colorado

Conditions at listing (December 1982): California Gulch flows about 1.5 miles to its confluence with the Arkansas River in Colorado's Leadville Mining District. The gulch has been seriously impacted by lead, silver, zinc, copper, and gold mining activities. Numerous abandoned mines and tailing piles are located in the gulch. The most serious water quality problem is acid mine drainage from the Yak Tunnel, a 3.4-mile tunnel constructed from 1895 to 1909 for the purpose of exploration, transportation of ore, and mine drainage. The tunnel is connected to 17 mines. The flow from the tunnel contains high concentrations of dissolved metals, including iron, lead, zinc, manganese, and cadmium.

California Gulch drains to the Arkansas River. There is concern about the potential for (1) contamination of domestic ground water supplies in the California Gulch area, (2) adverse impacts on fish in the Arkansas River, and (3) adverse impacts on livestock and crops grown on agricultural land irrigated by the Arkansas River.

Status (July 1983): EPA is conducting a remedial investigation to define the contamination problem the Yak Tunnel and tailings piles pose to ground water and surface water and a feasibility study to evaluate and select a remedy to correct the problem. The work is scheduled to be completed in the second quarter of 1984.

Response category / Cleanup status code, October 1984: F

CENTRAL CITY-CLEAR CREEK
Idaho Springs, Colorado

Conditions at listing (July 1982): The Central City-Clear Creek Site is in Gilpin County in north central Colorado. It consists of a limited number of abandoned gold mines near Central City and the Argo Tunnel in Idaho Springs. Completed in 1904, the 4-mile tunnel drains ground water from 30 or more inactive mines. Acid drainage containing heavy metals (cadmium, copper, iron, lead, manganese, and zinc) flows from the mines near Central City and the tunnel into Clear Creek, an important source of industrial, recreational, agricultural, and drinking water. In May 1980, a large discharge ("blow-out") from the tunnel affected downstream users. Wells supplying drinking water are also contaminated.

Status (July 1983): EPA plans to spend about $75,000 to conduct (1) a remedial investigation to determine the quality, quantity, and seasonal variations of flows from the mines and tunnel and (2) a feasibility study to identify alternatives for treating or preventiong the continuous discharge and for preventing blow-outs. The work is scheduled to be completed in the first quarter of 1985.

Response category / Cleanup status code, October 1984: R

DENVER RADIUM SITE
Denver, Colorado

Conditions at listing (October 1981): A 1915 U.S. Bureau of Mines report refers to a National Radium Institute in Denver, which led to the identification of 35 Colorado properties where radium was processed, refined, or fabricated into various devices or products. Of these properties, 31 are located in the metropolitan Denver area and include vacant land, industrial operations, buildings, and public streets. Other disposition of this radioactive residue is still unknown. All locations have varying levels of radioactivity. In June 1981, using funds available under the Resource Conservation and Recovery Act, EPA awarded a $100,00 Cooperative Agreement to Colorado, and added $178,600 in September 1981. The funds were to (1) conduct remedial investigations to determine the extent and type of contamination within each of the 31 Denver properties and (2) undertake design activities at 9.

Status (July 1983): In August 1982, EPA provided an additional $15,000 in contract support for a feasibility study to identify alternatives for remedial action at the properties. EPA plans to spend about $250,000 to extend the remedial investigation outside the boundaries of six properties and to complete a feasibility study consistent with CERCLA guidelines. Studies of five properties have been completed; the remaining 26 are scheduled for completion by the third quarter of 1984.

Response category / Cleanup status code, October 1984: R

LINCOLN PARK
Canon City, Colorado

Conditions at listing (September 1983): Ground water supplies in the Lincoln Park section of Canon City, Colorado, have been affected by the waste disposal activities of a nearby uranium mill operated by Cotter Corp. since 1958. Liquid waste containing both radionuclides and heavy metals from the mill was discharged for years into unlined tailings ponds. Cotter is in the process of transferring this material into lined impoundments. The company's monitoring data indicate a plume of contaminants, including molybdenum, uranium, and selenium, extending from the mill along Sand Creek and affecting private wells serving about 200 people in Lincoln Park. Sand Creek is an intermittent tributary to the Arkansas River.

Status (June 1984): Cotter reports that it has completed transferring the tailings.

Cotter has taken several actions challenging the proposed listing on the NPL of Lincoln Park. In August 1983, Cotter filed suit in U.S. District Court seeking injunctive and declaratory relief to prevent listing in the September proposal. The Court denied the preliminary injunction request. Cotter appealed the denial to the 10th Circuit Court of Appeals. A hearing on EPA's motion to dismiss Cotter's request for permanent injunction and declaratory relief from the U.S. District Court was held on March 6, 1984. EPA's motion was granted in April 1984.

On Dec. 7, 1983, Cotter filed a formal petition in the District of Columbia Circuit Court of Appeals to review the September proposed listing of Lincoln Park. No dates for argument have been scheduled.

Cotter's Radioactive Materials License, issued by Colorado under delegation from the Nuclear Regulatory Commission, is subject to renewal in the summer of 1984.

Response category / Cleanup status code, October 1984: D

LOWRY LANDFILL
Arapahoe County, Colorado

Conditions at listing (September 1983): Lowry Landfill covers 250 acres in Arapahoe County, 15 miles southeast of Denver, Colorado. From 1967 to 1980, the landfill, owned and operated by the City and County of Denver, was the major disposal site for municipal and industrial wastes generated by the Denver metropolitan area. An estimated 100 million gallons of liquid chemical wastes, including chlorinated solvents and oily wastes, were disposed with municipal refuse in unlined trenches excavated into surface soils and bedrock. Monitoring data collected by EPA, the State, and Denver indicate that volatile organic compounds (including benzene, toluene, tetrachloroethylene, and chloroform) have migrated from the trenches into shallow and bedrock ground water. The shallow contaminated plume extends at least 1 mile past the disposal areas.

EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

In June 1983, under CERCLA Section 106, EPA ordered Denver to control and treat the contaminated shallow ground water.

Status (June 1984): Pursuant to an Administrative Order on Consent under CERCLA 106 issued in January 1984, Denver is constructing a compacted clay barrier and a carbon adsorption treatment system. They are scheduled to be completed in July 1984.

The remedial investigation/feasibility study is underway.

Response category / Cleanup status code, October 1984: V R

MARSHALL LANDFILL
Boulder County, Colorado

Conditions at listing (July 1982): The Marshall Landfill covers 160 acres in Boulder County, Colorado. It has been operated as a municipal waste landfill by several private parties since 1965. An 80-acre portion was closed in 1974. Municipal waste and sewage sludge were dumped at both the active and inactive areas, and industrial liquid wastes may have been disposed of in both.

Samples from wells and seeps indicate elevated levels of contaminants, including phenols, methylene chloride, trichloroethylene, and diethyl phthalate in ground water beneath the site. Seepage from the base of the landfill is also contaminated. The seeps drain into Community Ditch, which flows to a water treatment facility operated by Louisville about 3 miles downstream from the landfill.

This is the top priority site in Colorado.

Status (July 1983): Action to isolate Community Ditch from all contaminated surface water seeps is presently planned, along with an investigation to determine the extent of contamination of ground water beneath the landfill. Based on results of the study, further remedial actions will be determined. These studies are scheduled to be completed by the second quarter of 1984.

Response category / Cleanup status code, October 1984: V / I

SAND CREEK INDUSTRIAL
Commerce City, Colorado

Conditions at listing (December 1982): The Sand Creek Industrial Site occupies more than 300 acres in Commerce City, Colorado. Most of the site is industrially zoned and has supported a high volume of chemical and petroleum production. The site includes the former Oriental Refinery, the 48th and Holly Streets Landfill, the Colorado Organic Chemical Corp., acid waste disposal pits used by the L. C. Corp., and several small residences and businesses. The area has been the subject of health and environmental concerns for the past 7 years. Investigations by the Tri-County District Health Department and the State have linked ground water, surface water, and soil contamination at the site with the four major facilities listed. The principal contaminants at the site include petroleum derivatives, sulfuric acid, and pesticides. In June 1982, EPA completed a study to characterize the nature of this contamination. Surface water, ground water, and soil samples were taken.

Status (July 1983): EPA's 1982 study showed the presence of inorganic contaminants (arsenic, cadmium, chromium, nickel, and zinc) in a well and in Sand Creek almost due north of the well. The study also showed that ground water is contaminated with various organic chemicals. The highest levels were found near the old Oriental Refinery and downgradient of the landfill.

Response category / Cleanup status code, October 1984: F / I

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

WOODBURY CHEMICAL CO.
Commerce City, Colorado

Conditions at listing (July 1982): Woodbury Chemical Co. operated a pesticide-formulating plant in Commerce City, Colorado, from the late 1950s until 1965, when it was destroyed by fire. Fire debris and rubble, including water-soaked bags of pesticides and contaminated soils, were disposed of in an adjacent vacant lot. About 500 cubic yards of wastes are involved. Soil samples taken in the lot have high levels of aldrin, DDT, endrin, and several other pesticides. The waste is uncovered, and the site unfenced and unmarked. The potential exists for contamination of surface water and ground water, which may be as shallow as 7 feet.

Status (July 1983): EPA will spend $65,000 to conduct a remedial investigation to determine the type and extent of contamination at the site, and a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the first quarter of 1984.

Response category / Cleanup status code, October 1984: R

National Priorities List Site **Commonwealth of the Marianas (CM)**

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/"Superfund")

PCB WAREHOUSE
Saipan, Northern Mariana Islands

Conditions at listing (October 1981): The PCB Warehouse on Saipan, Northern Mariana Islands, is a temporary shelter built to store about 1,400 gallons of transformer fluid containing up to 25,000 parts per million of PCBs. The fluid is stored, awaiting shipment or off-site disposal. The storage site is adjacent to the Philippine Sea. PCB contamination of drinking water and marine resources used for food is of concern.

This is the top priority site in the Northern Mariana Islands.

Status (July 1983): In July 1982, EPA approved $75,000 for studies of four sites -- Ordot Landfill, PCB Wastes, PCB Warehouse, and Taputimu Farm -- located on islands of the Insular Territories. Another $65,000 were added in November 1982. The funds are for two separate projects. One is to review and compile existing data for the Ordot Landfill, where ground water and surface water may be threatened by hazardous wastes mixed in with municipal wastes. The second is for the other three sites, where wastes are containerized. The funds are for a remedial investigation to determine the type and extent of contamination at each site and a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the third quarter of 1983. The next step, if approved, would be to select the cost-effective remedy and begin design activities. In January 1983, EPA awarded $10,000 to the U.S. Army Corps of Engineers for technical assistance to the project.

Response category / Cleanup status code, October 1984: R / C

BEACON HEIGHTS LANDFILL
Beacon Falls, Connecticut

Conditions at listing (December 1982): The Beacon Heights Landfill covers 83 acres on the crest of a large hill in a sparsely populated area of Beacon Falls, Connecticut. It operated intermittently from the 1920s through the late 1970s. From 1970 until it was closed in 1979, the site operated as a minimum-cover landfill for mixed municipal and industrial waste. Hockcanum Brook is contaminated with chloroform, methyl acetate, and ethyl acetate. Beginning in 1972, the State initiated several legal actions against the owners. When the landfill was closed, the terms of the 1977 permit for closure were not met, and the landfill continued to accept sludge from waste water treatment plants. The sludge was added to support vegetation in areas that were to be covered. The areas have been seeded and are supporting vegetation. Sludge from waste water treatment plants continues to be accepted and is applied on top of the existing vegetation.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It recommends that a $356,000, 9-month remedial investigation/feasibility study be undertaken to fully characterize the site and evaluate alternatives. Included is a sampling program for 35 private wells. Source controls to be evaluated include capping and diversion of surface water flow. Off-site actions to be evaluated include provision of alternate water supplies, if needed, and treatment of the identified contaminant plume.

Response category / Cleanup status code, October 1984: R

KELLOGG-DEERING WELL FIELD
Norwalk, Connecticut

Conditions at listing (September 1983): The Kellogg-Deering Well Field covers 10 acres in Norwalk, Fairfield County, Connecticut. It contains four wells that supply Norwalk's 45,000 residents. In 1975, routine monitoring by the Norwalk First Taxing District Water Department detected elevated levels of trichloroethylene in the wells. Since then, the State and private parties have investigated the site extensively to define the problem and identify source(s) of contamination. The water department blends water from the wells and nearby reservoirs to provide water that is safe for human consumption.

Status (June 1984): EPA is working with the water department to clean up the site. EPA has obligated $475,000 for remedial planning activities and for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R

LAUREL PARK, INC.
Naugatuck Borough, Connecticut

Conditions at listing (October 1981): The Laurel Park Landfill, operated by Laurel Park, Inc., covers 35 acres in a sparsely populated area of Naugatuck Borough, New Haven County, Connecticut. The landfill is situated on top of Huntington Hill, a steep ridge about 1.3 miles southwest of the center of Naugatuck. Since the 1950s, the landfill has accepted industrial and municipal wastes. About 12.8 acres were permitted by the State to accept the wastes. About 200 tons per day were disposed of at the site. In the early 1960s, citizens began to complain about odors, fires, spills, and run-off.

The maximum depth of the landfill is about 115 feet. The bedrock is shallow, and leachate is visible on all major slopes at the landfill. Leachate sampling at the base of the refuse slope confirmed the presence of toxic organic chemicals. In addition, various inorganic contaminants were measured in the unnamed tributary north of the site.

This site was once listed under the name "Laurel Park Landfill." It is the top priority site in Connecticut.

Status (July 1983): In September 1982, the State denied a request to expand the landfill.

EPA recently completed a remedial plan for the site. It recommends a $150,000 remedial investigation before proceeding to the feasibility study. Alternatives in the feasibility study involve (1) source control measures such as capping, leachate interception and treatment, and surface water diversion and (2) off-site measures to provide a permanent water supply to residents whose wells are affected or threatened, or to treat the water in the wells.

Enforcement actions by the State resulted in a Superior Court Judgment requiring the owner to install a leachate collection and treatment system by Oct. 31, 1983, and a water quality monitoring program. EPA has contracted for (1) an evaluation of the court-ordered cleanup plan with respect to the National Contingency Plan and (2) review of the report prepared by the site owner's contractor.

Response category / Cleanup status code, October 1984: V S

OLD SOUTHINGTON LANDFILL
Southington, Connecticut

Conditions at listing (September 1983): Old Southington Landfill covers 6 acres in Southington, Connecticut. It is suspected of contaminating the town's Production Well Number 5, which is 500 to 600 feet away and about 3,500 feet east of the Quinnipiac River. The landfill, which the town operated from 1947 to 1967 as a municipal landfill, also accepted hazardous waste. An industrial park and several homes have been built on top of the old landfill. Well Number 5 contains significant concentrations of volatile organic compounds, particularly 1,1,1-trichloroethane, according to analyses done by the State. Volatile organics are also present in nearby surface waters. A hydrogeologic investigation conducted by EPA suggests that the abandoned landfill is a source of volatile organics entering area ground water. An intensive hydrogeologic study is needed to determine flow patterns of local ground water, which will help further define the source(s) of contamination.

Status (June 1984): The State has discussed with the town issuance of an order requiring the town to hire a contractor to conduct a remedial investigation/ feasibility study. The work would include the intensive hydrogeologic study. The town is presently soliciting proposals for the study.

Response category / Cleanup status code, October 1984: D

SOLVENTS RECOVERY SERVICE OF NEW ENGLAND
Southington, Connecticut

Conditions at listing (December 1982): Solvents Recovery Service of New England (SRSNE) began to distill and recover solvents in Southington, Connecticut, in 1955. Wastes were stored and disposed of on-site until the mid 1970s on 12 acres west of the Quinnipiac River. In 1965, the Town of Southington installed Production Well #4 about 2,000 feet south of SRSNE, south of the Quinnipiac River. In 1976, Southington Production Well #6 was installed about 1,300 feet south of SRSNE, on the north side of the Quinnipiac. In September 1976, the State found that both wells were contaminated with volatile organic compounds. In February 1980, an EPA contractor confirmed that SRSNE was responsible for the contamination of Production Well #6 and discovered that other closer sources south of the Quinnipiac were contributing to the contamination of Production Well #4.

Status (July 1983): In December 1982, SRSNE signed a Consent Decree with EPA requiring (1) a system to recover ground water on- and off-site and (2) a plan for on-site storage and management of hazardous wastes. In June 1983, the company submitted to EPA a complete engineering analysis for the design of the on-site system.

Response category / Cleanup status code, October 1984: V

National Priorities List Site

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

YAWORSKI WASTE LAGOON
Canterbury, Connecticut

Conditions at listing (December 1982): The Yaworski Waste Lagoon occupies 340 acres in the Town of Canterbury, Connecticut. The lagoon, which is surrounded by a 6- to 9-foot dike, measures 700 feet by 400 feet and is 12 feet deep. The site is bordered on three sides by the Quinnihaug River. The lagoon is from 20 to 45 feet from the Quinnihaug. From about 1948 to 1973, drummed material and bulk wastes (including textile dyes, solvents, resins, acids, caustics, still bottoms, and solvent-soaked rags) were accepted. Periodically, wastes were burned to reduce the volume in the lagoon. In August 1973, the State issued an order to close the lagoon due to organic odors. In May 1980, EPA detected methyl ethyl ketone, ethyl benzene, toluene, and xylene in the lagoon. The State then ordered the owner to study the site.

Status (July 1983): The owner is implementing a site closure plan, which the State approved. As of May 31, 1983, approximately 90 percent of the lagoon had been filled in. When the filling is complete, the lagoon will he capped with clean dirt.

EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It is scheduled to he completed in the third quater of 1983.

Response category / Cleanup status code, October 1984: R S

ARMY CREEK LANDFILL
New Castle County, Delaware

Conditions at listing (October 1981): The Army Creek Landfill covers 47 acres in New Castle County, Delaware. It is adjacent to the Delaware Sand & Gravel Landfill and was owned and operated by the county as a municipal and hazardous waste disposal facility until it reached capacity in 1970. The site holds 1.9 million cubic yards of refuse. Since 1972, the county has spent \$4 million to control the migration of contaminants, including lead, chromium, arsenic, and a variety of organic compounds, to an aquifer that supplies water to over 100,000 people.

This site was once listed under the name "Delaware Sand & Gravel - Llangollen Army Creek Landfills."

Status (July 1983): The State is drafting a National Pollutant Discharge Elimination System permit for the discharge of ground water to Army Creek.

EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: V F

DELAWARE CITY PVC PLANT
Delaware City, Delaware

Conditions at listing (October 1981): Stauffer Chemical Co. operated a polyvinyl chloride (PVC) plant in Delaware City, New Castle County, Delaware, from the early 1970s to 1981. The facility, which covers 180 acres, disposed of various wastes in several unlined impoundments and pits. Portions of the plant were sold to Formosa Plastics in May 1981. Ground water in the area is contaminated with hazardous substances associated with the PVC plant, and this problem may have existed for years.

This site was once listed under the name "Stauffer Chemical Co."

Status (July 1983): In April 1982, Stauffer started a detailed hydrogeological investigation at the site, which included drilling several shallow monitoring wells and performing a resistivity survey. The company presented the results to EPA in February 1983, along with a proposal for a detailed feasibility study. A cleanup order is currently being negotiated. In addition, Stauffer has provided alternate water supplies for residents whose water is contaminated.

Response category / Cleanup status code, October 1984: V F

DELAWARE SAND & GRAVEL LANDFILL
New Castle County, Delaware

Conditions at listing (October 1981): The Delaware Sand & Gravel Landfill covers 10 acres adjacent to the Army Creek Landfill in New Castle County, Delaware. Both landfills accepted municipal and hazardous waste. According to reports EPA received, about 7,500 drums of liquid waste were opened and emptied into an unlined trench on the Delaware Sand & Gravel Landfill, which is privately owned. The underlying aquifer and surrounding surface waters are contaminated by a variety of organic and inorganic hazardous substance from both sites. The site closed in 1976 when the State filed suit against the owners for improper operating procedures. The landfill was covered with sand and gravel, which are very permeable.

This site was once listed under the name "Delaware Sand & Gravel-Llangollen Army Creek Landfills.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. Any measures taken at the site will be in conjunction with activities proposed at the Army Creek Landfill.

The State suit against the site owner is not yet resolved.

Response category / Cleanup status code, October 1984: R / O

HARVEY & KNOTT DRUM, INC.
Kirkwood, Delaware

Conditions at listing (July 1982): The Harvey & Knott Drum, Inc., Site covers 25 acres north of the Delaware-Chesapeake Canal in Kirkwood, Delaware, approximately 150 yards from the Maryland border. The site was operated from 1960 to 1969 by Harvey & Knott as an open dump and burning site for the disposal of municipal and industrial waste. About 300 drums are piled on the surface. Most are empty, but 35 drums are suspected of containing PCB sludges and other hazardous substances. EPA received reports that the owner may have placed liquid waste in trenches and on the ground. Stressed vegetation and discolored soil are obvious at numerous locations on-site, and ground water on-site is contaminated. The surrounding area is densely populated, and the residents depend on private shallow wells for water.

Early in 1982, EPA used CERCLA emergency funds to fence the disposal area and to contain 35 leaking drums on-site. The State also funded a portion of the investigation. Both the State and EPA conducted extensive sampling on-site and also tested private wells.

Status (July 1983): Conditions at this site are currently being addressed through response actions funded by CERCLA.

Response category / Cleanup status code, October 1984: R F / O

NEW CASTLE SPILL
New Castle County, Delaware

Conditions at listing (December 1982): The New Castle Spill Site in New Castle County, Delaware, is situated in an industrial and commercial location. Several compounds have been found in the shallow aquifer, including TRIS [tris (beta-chloropropyl) phosphate] and other organic substances. It is known that some of these chemicals were stored a a nearby industrial facility, but other chemicals, source unknown, were also found in ground water. The shallow aquifer that had been used by the New Castle Board of Water and Light was taken out of service, and 7,000 people are now supplied water from another source.

This site was once listed under the name "Tris Spill."

Status (July 1983): EPA is presently reviewing the toxicity of TRIS to determine the health hazard.

Response category / Cleanup status code, October 1984: D

NEW CASTLE STEEL
New Castle County, Delaware

Conditions at listing (December 1982): The New Castle Steel Site covers 3 acres in New Castle County, Delaware. It produces iron castings for commercial use. Since 1973, a by-product of the process, electric furnace dust (classified as a hazardous waste under the Resource Conservation and Recovery Act), has been stored in piles on-site. The plant started to recycle the dust in its furnace in December 1980. Run-off from the site is contaminated. There is also the potential for contamination of ground water.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site.

The State is negotiating with the company for cleanup under the Resource Conservation and Recovery Act.

Response category / Cleanup status code, October 1984: D

TYBOUTS CORNER LANDFILL
New Castle County, Delaware

Conditions at listing (October 1981): Tybouts Corner Landfill, New Castle County, Delaware, is the site of a former sand and gravel operation. From 1969 to 1971, the 50-acre site, which is privately owned, accepted municipal and industrial wastes. Surface water and ground water are contaminated with hazardous organic and inorganic substances. The area is highly dependent on ground water. In 1976, the State issued demand letters to parties responsible for wastes associated with the site and requested that they take measures to remedy the ground water contamination problem. The parties refused to take responsibility.

This the top priority site in Delaware.

Status (July 1983): In January 1983, EPA signed a $755,000 Superfund State Contract with Delaware for a remedial investigation to determine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the second quarter of 1984.

The Department of Justice, on behalf of EPA, has brouhgt a Federal civil action seeking injunctive relief against parties responsible for wastes associated with the site.

Response category / Cleanup status code, October 1984: V R F

WILDCAT LANDFILL
Dover, Delaware

Conditions at listing (December 1982): The Wildcat Landfill covers about 44 acres in a wetland area adjacent to the St. Jones River in Dover, Delaware. The site was privately owned and operated for disposal of municipal and industrial waste until 1973, when it was closed for numerous permit violations under the State's solid waste regulations. Wastes were dumped in wetland marshes and frequently left uncovered. Various drums and solidified sludges are visible on the surface, and ground water is contaminated with lead, cadmium, beryllium, arsenic, benzene, phthalates, and low levels of PCBs (6 parts per billion).

Status (July 1983): Negotiations are underway for a Superfund State Contract covering a remedial investigation to determine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: D

ALPHA CHEMICAL CORP.
Galloway, Florida

Conditions at listing (October 1981): The Alpha Chemical Corp. Site covers about 40 acres near Galloway, Florida. A shallow well near a facility that manufactures polyester resins is contaminated with cadmium, chromium, and lead. This ground water is connected to the aquifer that supplies water to nearby communities. At the encouragement of the State, Alpha Chemical modified its process and upgraded its waste water treatment to control most of its discharges.

Status (July 1983): The State is negotiating with Alpha Chemical for monitoring of ground water and for building a lined surface impoundment for its wastes.

Response category / Cleanup status code, October 1984: D

AMERICAN CREOSOTE WORKS, INC. (PENSACOLA PLANT)
Pensacola, Florida

Conditions at listing (October 1981): The American Creosote Works, Inc., Site covers 1.5 acres in Pensacola, Florida, about 0.3 miles north of where Bayou Chico and Pensacola Bay meet. The facility treated wood with creosote and pentachlorophenol (PCP) from the early 1900s to late 1981 or early 1982. PCP-contaminated waste water was discharged into two unlined 80,000-gallon percolation ponds. In February 1981, the U.S. Geological Survey identified phenols in ground water associated with American Creosote Works. At present, no drinking supply wells are within the known zone of contamination.

Status (July 1983): In March 1982, American Creosote sold all the equipment on-site and later filed for bankruptcy under Chapter 11 of the Federal Bankruptcy Act. The State has negotiated a Consent Order requiring American Creosote to restore the discharge areas and install on-site monitoring wells. The company constructed higher berms around the ponds to prevent overflow during heavy rainfall.

EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. EPA plans to fund (1) a $290,000 remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action and (2) an $85,000 initial remedial measure involving fencing the site, posting warning signs, reconstructing the berms, and controlling flooding from the waste ponds. The work is scheduled to start in the third quarter of 1983.

Response category / Cleanup status code, October 1984: R F / O

BROWN WOOD PRESERVING
Live Oak, Florida

Conditions at listing (December 1982): The Brown Wood Preserving Site, now abandoned, covers 29 acres in Live Oak, Florida. From 1946 until 1977, wood was treated on-site with creosote and pentachlorophenol. Waste water was stored on-site in a 5-acre surface impoundment, which contains an estimated 25,000 cubic yards of phenolic wastes. Soil in a ditch leading from the treatment/storage area is contaminated with creosote wastes. The site is surrounded by residences using private wells and appears to be in a sink hole that may have a hydraulic connection to the deeper aquifer.

Status (July 1983): EPA collected samples early in 1983 to assess ground water conditions in the area and found excessive levels of organic compounds associated with creosote and pentachlorophenol treatment of wood products. Further action awaits release of the final report on the site.

Response category / Cleanup status code, October 1984: F

CABOT/KOPPERS
Gainesville, Florida

Conditions at listing (September 1983): The Cabot/Koppers Site covers about 38 acres in Gainesville, Alachua County, Florida. The Cabot portion covers about 25 acres; the Koppers portion, adjacent on the west, covers the remainder. Both Cabot Corp. and Koppers Co., Inc. are still on-going businesses. Over the years, the two companies built an unknown number of settling ponds for holding process wastes containing phenols and coal tar products. In 1966, Cabot sold its property to a new owner, who, in 1967, dumped the contents of two of the ponds into shallow ground water and a ditch leading to Hogtown Creek. Subsequently, local citizens began to complain that clumps of tar were being carried downstream from the site. About two-thirds of Gainesville (population of 81,000) is drained by Hogtown Creek.

Seepage from the ponds over an extended period and subsequent development activity at the site have led to widespread contamination of ground water and surface water. EPA has detected various organics, including aromatic and polynuclear aromatic compounds in ground water and soil. Ground water is contaminated 0.3 miles east and north of the site, and soil 30 feet below the surface is highly contaminated.

Status (June 1984): The State has selected a contractor to conduct a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R S

COLEMAN-EVANS WOOD PRESERVING CO.
Whitehouse, Florida

Conditions at listing (October 1981): The Coleman-Evans Wood Preserving Co. Site covers 11 acres in Whitehouse, Florida, about 8 miles west of Jacksonville. Since 1950, the facility has treated wood with pentachlorophenol (PCP). It discharged its waste waters into unlined pits, which were later covered. Currently, waste water enters a water/oil separator. Sludge settles out, and the liquid is recycled back to the plant. Sludge is removed every 90 days to an approved disposal site.

Shallow ground water in the residential area adjacent to the site is contaminated with PCP. Residents depend on private wells for their drinking water. A public water supply is not available. In 1980, EPA installed wells to monitor ground water on the site.

Status (July 1983): The State signed a Consent Order in December 1982 with the company for a remedial investigation at the site. The investigation will include a hydrogeological assessment and a determination of the extent of off-site contamination. First round of data is due in July 1983.

Response category / Cleanup status code, October 1984: S

DAVIE LANDFILL
Davie, Florida

Conditions at listing (October 1981): Davie Landfill in Davie, Broward County, Florida, has been owned and operated by the county since 1971. The facility includes a 30-acre asphalt-lined sanitary landfill, an 80-acre trash fill, and a 10-acre waste water lagoon. Above-background levels of ammonia, lead, chromium, iron, and arsenic have been detected in monitoring wells near the lagoon. Leachate from the lagoon contaminates the Biscayne Aquifer, which is the sole source of water for about 10,000 residents in the area. Ground water 1,300 feet downgradient of the lagoon is contaminated to a depth of 35 feet.

This site was once listed under the name "Broward County Solid Waste Disposal Facility."

Status (July 1983): The county imposed strict controls to improve operations at the landfill. The county, its consultants, the State, and the U.S. Geological Survey conducted a number of studies to document the extent of contamination. The consultants installed 23 monitoring wells in the contaminated plume of ground water and areas influenced by the plume. The system allows sampling through the depth of the aquifer and provides an early warning of plume encroachment on drinking wells.

Analyses show that no pollutants are present at levels that would violate water quality standards or pose any threat to human health, and that contamination of a drinking water supply is not imminent. Sampling will continue and be closely reviewed by the county, State, and EPA.

Response category / Cleanup status code, October 1984: D

FLORIDA STEEL CORP.
Indiantown, Florida

Conditions at listing (December 1982): The Florida Steel Corp. Site occupies 150 acres in Indiantown, Florida. The company used an electric furnace process to melt scrap metal and fabricate it into various products. The site was closed for economic reasons in January 1982. The operations generated emission control dust, which contains heavy metals and is listed as a hazardous waste by the Resource Conservation and Recovery Act. Some of the dust was spread over the facility's roads, and about 75,000 cubic yards were deposited on the southern portion of the site in waste piles. In November 1980, Florida Steel began to collect the dust in three baghouses and transport it to a chemical plant in South Carolina for recovery of lead and zinc.

Florida Steel drew drinking water from an on-site well, and the Indiantown public water supply comes from a group of shallow wells located within 3 miles of the site. Some local surface waters are used for irrigation.

Status (July 1983): Results from EPA sampling indicate no violation of primary drinking water standards in the area's drinking wells. The company studied the shallow aquifer downgradient from the waste piles and found no violation of ground water standards. However, the State has requested the company to continue to monitor on-site wells and to prepare a remedial plan addressing removal of the waste piles.

Response category / Cleanup status code, October 1984: D

GOLD COAST OIL CORP.
Miami, Florida

Conditions at listing (October 1981): Gold Coast Oil Corp. reclaimed solvents on a 2-acre site in Miami, Florida, leased from Seaboard Coast Line Railroad Co. On the site are 2,500 corroded and leaking drums containing sludge from the solvent distilling operation, contaminated soils, and paint wastes. Additionally, large storage tanks of hazardous waste are located on-site. EPA detected lead, zinc, and various organic pollutants in shallow ground water at the site, part of the Biscayne Aquifer, which is the principal source of drinking water in this part of Florida.

Status (July 1983): The State evicted Gold Coast Oil from the property in 1982, and Seaboard Coast Line voluntarily cleaned up the site in August 1982, with EPA personnel monitoring the activities. Also, EPA (1) recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site and (2) is conducting a search for all potential generators of wastes at the site.

Response category / Cleanup status code, October 1984: D

HIPPS ROAD LANDFILL
Duval County, Florida

Conditions at listing (September 1983): The Hipps Road Landfill occupies 9 acres in the Jacksonville Heights area of Duval County, Florida. In 1983, the State found that a number of residential wells near the abandoned site were contaminated with organics, including chlorinated compounds. The city advised the owners not to drink the water. Because of the danger of more widespread contamination in the area, the U.S. Geological Survey, the State, the St. John's Water Management District, and the City of Jacksonville started a study to evaluate the problem. Studies made by the State in May 1983 indicate that about 30 of the 100 or so residential wells in the area may be affected by the leachate plume from the landfill. The City Water Department is in the process of providing alternate water supplies to the affected area.

Status (June 1984): In December 1983, EPA completed a search for parties potentially responsible for wastes associated with the site. The State conducted additional well tests and expects the results to confirm the original results. The City Water Department has installed lines to the affected homes and has completed the hookups to homeowners in the area. The City Legislature adopted special rules to defer some of the cost of the hookups and has funded further off-site water sampling. In February 1984, the State requested that EPA take the lead in a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. In early June 1984, EPA sent letters to potentially responsible parties notifying them of possible legal action under CERCLA.

Response category / Cleanup status code, October 1984: D

HOLLINGSWORTH SOLDERLESS TERMINAL CO.
Fort Lauderdale, Florida

Conditions at listing (October 1981): Hollingsworth Solderless Terminal Co. manufactures small solderless electrical connectors on a site of less than 1 acre in Fort Lauderdale, Florida. In the process, the connectors are cut and formed out of copper sheets, annealed, degreased, and then electroplated with tin or nickel. From about 1976 to 1981, Hollingsworth injected trichloroethylene, oil, grease, and dyes into a 100-foot-deep well on-site and discharged electroplating wastes into a large on-site drainfield. In addition, wastes periodically entered the ground through spillage or other smaller drainfields. Several communities in the vicinity of the site draw water from the shallow Biscayne Aquifer.

Status (July 1983): In July 1982, Hollingsworth took several steps to correct the problem or characterize the extent of contamination. The company pumped the injection well, installed 16 on-site monitoring wells, sampled soil, conducted a ground water gradient study, and sampled public wells. Various levels of contamination were found in some of the monitoring wells, water supply wells, and soil samples.

EPA recently prepared a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

KASSAUF-KIMERLING BATTERY DISPOSAL
Tampa, Florida

Conditions at listing (October 1981): The Kassauf-Kimerling Battery Disposal Site covers 1.5 acres in Tampa, Florida. About 4 feet of battery casings from a local battery-cracking operation were used as fill in a marshy area. High concentrations of lead were detected in surface waters near the site, and low concentrations in on-site monitoring wells. An estimated 1,500 wells are within 3 miles of the site, and surface drainage from the site runs toward a private fish farm and the nearby Palm River.

This site was once listed under the name "Timber Lake Battery Disposal".

Status (July 1983): In May 1983, EPA issued an order under Section 3013 of the Resource Conservation and Recovery Act. It requires monitoring of ground water and surface water, analysis of the battery fill material, and general soil sampling.

Response category / Cleanup status code, October 1984: R F

MIAMI DRUM SERVICES
Miami, Florida

Conditions at listing (October 1981): Miami Drum Services recycled drums for 15 years on a 1-acre site in a predominately industrial area of Miami, Florida. Dade County obtained a court order to close the facility in 1981. While the company was in operation, as many as 5,000 drums of various chemical wastes (including corrosives, solvents, phenols, and toxic metals) were observed on the site. Surface spills and percolation of contaminated waste water have saturated the soil at the facility. The Biscayne Aquifer is contaminated with various toxic organic solvents and heavy metals. The site is approximately 750 feet from the Medley Well Field, which extracts drinking water from the Biscayne Aquifer during peak demand periods.

In September 1981, EPA approved $500,000 in funds made available under the Resource Conservation and Recovery Act to study the Biscayne Aquifer, including the Miami Drum Services Site, which Dade County had acquired for construction of its new mass transit system.

To emphasize the threat to the regional water supply, this site, the Northwest 58th Street Landfill, and the Varsol Spill Site were collectively designated as the "Biscayne Aquifer Site" when they were first listed.

Status (July 1983): The EPA-funded study recommended excavation and off-site disposal of contaminated soil to meet the county's construction schedule. The county authorized use of transportation funds, and by January 1982 had removed 8,500 cubic yards of contaminated soil and treated 0.5 million gallons of ground water.

In September 1982, EPA awarded a Cooperative Agreement providing $1,434,565 to Florida to fund the county's cleanup, to do a remedial investigation defining how the plume of contaminated ground water is migrating from the site, and to do a feasibility study to identify alternatives for ground water cleanup. The work is scheduled to be completed in the third quarter of 1983.

EPA recently completed a remedial investigation at this site as part of the area-wide "Biscayne Aquifer" project. In January 1983, EPA approved $200,000 for a feasibility study of the aquifer. The work is scheduled to be completed in the third quarter of 1983.

Response category / Cleanup status code, October 1984: R / O

MUNISPORT LANDFILL
North Miami, Florida

Conditions at listing (December 1982): The Munisport Landfill covers 291 acres in North Miami, Florida. Between 1974 and 1980, it was operated as a sanitary landfill by a lessee of the City of North Miami. During these years, it may have received hazardous wastes. EPA found low concentrations of various organic pollutants in leachate from the site, and elevated levels of lead in several perimeter monitoring wells. The site is close to two public well fields and to Biscayne Bay, which is part of Florida's water quality improvement program and is also designated by the Federal government as a critical habitat for the Florida manatee.

Status (July 1983): In June 1983, EPA the State, and county visited the site to assess the need for EPA to start a sampling program at the end of the summer of 1983.

Response category / Cleanup status code, October 1984: D

NORTHWEST 58th STREET LANDFILL
Hialeah, Florida

Conditions at listing (October 1981): The Northwest 58th Street Landfill is a large active municipal landfill covering 1 square mile near Hialeah, Florida, along the eastern edge of the Everglades. Operated continuously since 1952 by Dade County, this facility receives as much as 3,000 tons per day of municipal solid waste. Leachate from the landfill has contaminated ground water with metals such as arsenic, cadmium, chromium, and lead, as well as phenols and halogenated organic compounds. Two major public water supply wells are located downgradient within 3 miles of the site.

To emphasize the threat to the regional water supply, this site, the Miami Drum Services Site, and the Varsol Spill Site were collectively designated as the "Biscayne Aquifer Site" when they were first listed.

Status (July 1983): The State has a civil suit pending against Dade County for failure to cease operations by August 1981 (as required by a 1979 consent decree). The State and county are working together to develop a final plan for closing the facility.

EPA recently completed a remedial investigation at this site as part of the area-wide "Biscayne Aquifer" project. In January 1983, EPA approved $200,000 for a feasibility study of the aquifer. The work is scheduled to be completed in the third quarter of 1983.

Response category / Cleanup status code, October 1984: R

PARRAMORE SURPLUS
Mount Pleasant, Florida

Conditions at listing (December 1982): The Parramore Surplus Site consists of about 25 acres near Mount Pleasant, Florida, on which surplus military equipment is stored. A State inspection found drums of hazardous waste in four areas on the site. PCBs, solvents, and cyanide were identified in some of the drums. Soil is also contaminated.

Status (July 1983): A generator removed PCB-contaminated drums and soil. The State has accepted the operator's waste storage and consolidation plan, which will help prevent release of the remaining drummed waste to the environment. EPA and the State will monitor implementation of the plan.

Response category / Cleanup status code, October 1984: D

PEPPER STEEL & ALLOYS, INC.
Medley, Florida

Conditions at listing (September 1983): Pepper Steel & Alloys, Inc., has processed scrap metals since the early 1970s on a 10-acre site in Medley, Dade County, Florida. A portion of its business has been the recycling of transformers and other electrical equipment. The company reportedly disposed of transformer oil containing PCBs on the site and on two adjacent sites.

In 1975, a county inspector sampled an area of oil-soaked ground at Pepper Steel. Results showed high levels of oil and grease. In December 1982, the county observed an oily layer up to 6 inches deep in six pits, each 2 to 4 feet deep, on the site. Analyses of the oil revealed high concentrations of PCBs.

Early in 1983, EPA conducted a geophysical survey of the site and identified about a dozen zones requiring further investigation. Soil sampling determined that PCBs were present in at least two zones. Using approximately $250,000 in CERCLA emergency funds, EPA removed soil in "Zone A" and oil floating on the shallow aquifer underlying the site. EPA also drilled observation wells and sampled on-site wells and surface water in the immediate area. Florida Power and Light Co., which allegedly sent electrical equipment to Pepper Steel for recycling, has agreed to perform further sampling and analysis outside of "Zone A" and to recommend remedial alternatives.

Status (June 1984): EPA is conducting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R F / O

PICKETTVILLE ROAD LANDFILL
Jacksonville, Florida

Conditions at listing (October 1981): The Pickettville Road Landfill covers 53 acres near Jacksonville, Florida. It began operation on a limited basis in the early 1940s. Full-scale operation started in 1967 and stopped in 1977. The landfill received all types of wastes, ranging from household garbage to hazardous materials. Local residents complained of run-off problems from the landfill, and leachate streams also were reported. Initially, monitoring wells in the area detected iron and chromium. Local private wells serving approximately 1,000 people are at present free of contamination. No public water supply is available to residents in the area. In June 1981, EPA found ground water contamination to a depth of 80 feet.

Status (July 1983): Jacksonville installed additional monitoring wells around the site. Recent sampling indicates one monitoring well contains excess lead. A leachate stream containing low levels of pyrene and fluoranthene has been controlled by fillng and grading the area where the landfill was eroding.

Response catetory / Cleanup status code, October 1984: D

PIONEER SAND CO.
Warrington, Florida

Conditions at listing (October 1981): Pioneer Sand Co. mines sand for commercial use in Warrington, 5 miles west of Pensacola, Florida. The company owns a 20-acre inactive quarry into which shredded auto parts, construction debris, and various industrial sludges and resins have been deposited. Two surface impoundments are also located on the site. The State and EPA detected high levels of chromimum, lead, and nickel in on-site soils. High levels of chromium and lead were also detected in a monitoring well installed by Pioneer Sand and in one of the surface impoundments. A well field for the City of Pensacola (population 67,000) is within 3 miles of the site.

Status (July 1983): In April 1983, EPA performed a geophysical survey of the site. Draft results suggest that ground water may be contaminated beneath the alleged disposal area. Further ground water investigations will be conducted.

Response category / Cleanup status code, October 1984: R S

REEVES SOUTHEASTERN GALVANIZING CORP.
Tampa, Florida

Conditions at listing (October 1981): Reeves Southeastern Galvanizing Corp. manufactures galvanized fence wire using the hot dip process on 3 acres east of Tampa, Hillsborough County, Florida. Wash water and periodic dumping of rinse baths from this process produce an acid liquid with high concentrations of iron, zinc, and chromium. Since the mid-1960s, this material has been discharged into two unlined percolation ponds on the property, contaminating both ground water and surface water with heavy metals. Consultants for Reeves, the State, and county have conducted numerous studies that document the extent of contamination at the site.

County wells are located about 1 mile upgradient of the site, and numerous private wells lie within 3 miles of the site in all directions.

In 1974, Hillsborough County issued a notice of violation and a compliance schedule to Reeves. In response, Reeves in 1981 installed an advanced waste water treatment system to neutralise the acid and remove 90 percent of the heavy metals.

Status (July 1983): Reeves plans to remove the water from the percolation ponds and take soil borings to determine the depth of zinc contamination.

Response category / Cleanup status code, October 1984: D / O

SAPP BATTERY SALVAGE
Cottondale, Florida

Conditions at listing (October 1981): Sapp Battery recovered lead from spent lead-acid batteries on a 30-acre site in a sparsely area between Alford and Cottondale, Florida, until it closed in January 1980. Elevated levels of lead, zinc, and sulfuric acid have been detected in nearby drainage culverts, Little Dry Creek, and Steele City Bay. Dead and discolored vegetation, as well as strong sulfurous odors, have been noted along the drainage route from the site. Ground water pollution has not been documented to date.

In August 1980, using $180,000 made available under Section 311 of the Clean Water Act, EPA undertook an emergency cleanup action, which resulted in a temporary restoration of pH levels similar to background levels downstream from Sapp Battery Salvage.

Status (July 1983): In August 1982, EPA awarded a $235,000 Cooperative Agreement to Floria for a remedial investigation to determine the type and extent of ground water contamination at the site and for a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the first quarter of 1984. EPA is also conducting a limited feasibility study (scheduled to be completed in the third quarter of 1983) to identify alternatives for surface cleanup.

Response category / Cleanup status code, October 1984: R / I

SCHUYLKILL METALS CORP.
Plant City, Florida

Conditions at listing (December 1982): Schuylkill Metals Corp. recovers lead from storage batteries on a 7-acre site in Plant City, Florida. Leachate containing heavy metals and sulfuric acid is migrating from unlined impoundments into an adjacent drainage ditch that empties into Pemberton Creek. Monitoring of ground water and surface water in the area has detected lead, chromium, and nickel, as well as ammonia, which was used to neutralize the plant's acid waste water. Extremely high levels of lead were also found in sediment in a downstream ditch draining to Pemberton Creek. EPA has determined that the pollution from this site is from current operations subject to the authorities of the Resource Conservation and Recovery Act of 1976 and not CERCLA.

Status (July 1983): Schuylkill Metals is now sending its neutralized waste water to the Plant City sewer system.

Response category / Cleanup status code, October 1984: D / O

SHERWOOD MEDICAL INDUSTRIES
Deland, Florida

Conditions at listing (December 1982): Sherwood Medical Industries manufactures medical equipment in Deland, Florida. Over a period of 4 to 5 years, the company disposed of about 2 tons of liquid and sludge, primarily contaminated with potassium chromates, into an unlined surface impoundment. The impoundment is in the shallow aquifer overlying the Floridan Aquifer, which supplies water for numerous private and public wells near the site, including the city of Deland's water supply well.

Status (July 1983): Sherwood Medical installed a waste water treatment facility that enables its discharge to meet Florida's Drinking Water Standards for chromium. The company is also pumping ground water from the shallow aquifer to its treatment system. The company is in interim status under the Resource Conservation and Recovery Act.

The State has recommended monitoring for nickel and halogenated solvents before deciding on the significance of water quality problems at the facility.

Response category / Cleanup status code, October 1984: D

62ND STREET DUMP
Tampa, Florida

Conditions at listing (December 1982): The 62nd Street Dump covers 5 acres in Tampa, Hillsborough County, Florida. It is an abandoned pit filled with industrial refuse of different types, including auto scrap and battery casings from a local battery-cracking facility. Immediately adjacent to the site is a private fish farm and beyond that an 80-acre marsh system that drains to a nearby lake. Heavy metals and other industrial pollutants may have been entering ground water, which supplies drinking water to Hillsborough County.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

TAYLOR ROAD LANDFILL
Seffner, Florida

Conditions at listing (October 1981): The Taylor Road Landfill is owned and was operated by Hillsborough County in Seffner, Florida, from 1975 until February 1980. This 40-acre landfill was intended for the disposal of municipal refuse, but unknown quantities of industrial waste may have been deposited. Private wells in the area are contaminated with volatile organic compounds. At one time, methane gas from the landfill was detected at concentrations above the lower explosive limit near residences adjacent to the site. The county installed a gas collection system in an attempt to correct this problem. An inventory identified 580 wells within 1 mile of this facility. EPA has investigated and sampled the site on several occasions.

In October 1980, the Department of Justice, on behalf of EPA, brought a Federal civil suit against the county seeking injunctive relief.

Status (July 1983): EPA and the county have signed a Consent Decree with the Hillsborough County Utilities Department. The decree provides for installation of public water supply to affected residential wells and a 30-year ground water monitoring program for the entire landfill.

Response category / Cleanup status code, October 1984: V F / O

TOWER CHEMICAL CO.
Clermont, Florida

Conditions at listing (October 1981): Tower Chemical Co. manufactured pesticides from 1970 until November 1980 on a 30-acre site in Clermont, Florida. About 1,000 people live in this area of Lake County, and much of the land is devoted to orange groves. The company used DDT as an intermediate and disposed of its wastes in a percolation pond. When rainfall caused the pond to overflow, damaging an adjacent wetlands, the company constructed a spray irrigation field for waste disposal. The State never permitted the field. Tower Chemical stopped operations after two court orders prohibited its use of the field and of DDT. The land was later purchased by a real estate investment group. EPA first investigated the site in August 1980. At that time, EPA found that the percolation pond and an the site in August 1980. At that time, EPA found that the percolation pond and an area where waste had been burned were contaminating surface water and ground water.

Status (July 1983): In June 1983, EPA issued an order to the company under CERCLA Section 106; the company did not respond to this order. EPA then began remedial work at the site, including setting up a water treatment system for the percolation pond, excavating the burn site, and removing the soil to an approved disposal site.

Response category / Cleanup status code, October 1984: R F / O

TRI-CITY OIL CONSERVATIONIST, INC.
Tampa, Florida

Conditions at listing (September 1983): Tri-City Oil Conservationist, Inc., recycles waste oil at a 0.25-acre site in Tampa, Hillsborough County, Florida. The site is about 3,000 feet from the Hillsborough River and within 3 miles of the public well field serving the community's 16,000 residents. About 35 people served by nine private wells live within one block of the site.

About 260 cubic yards of oil and sludge cover the ground at the site. An above-ground storage facility holds 16,000 gallons of waste oil. Sampling performed by the State indicates high levels of heavy metals in the oily wastes.

Status (June 1984): In February 1984, EPA used $40,000 in CERCLA emergency funds to remove all surface wastes. Also in February, EPA issued an Administrative Order to the responsible parties informing them that their activities represent an imminent and substantial danger to public health and the environment and that they must act promptly to stop those activities.

Response category / Cleanup status code, October 1984: R F / O

VARSOL SPILL
Miami, Florida

Conditions at listing (October 1981): An underground pipeline leak resulted in the discharge of about 1.6 million gallons of Varsol (a petroleum solvent) at the Miami, Florida, International Airport. After the spill was discovered in 1968, concrete walls were installed. The walls, along with an existing storm drain, contain the solvent, which floats on top of the Biscayne Aquifer, within the airport. About 2,000 feet from the walls is the Miami Springs Well Field, which provides some of Miami's drinking water. At the time of the spill, Dade County took an enforcement action against Eastern Airlines, owner of the material.

To emphasize the threat to the regional water supply, this site, the Miami Drum Services Site, and Northwest 58th Street Landfill were collectively designated as the "Biscayne Aquifer Site" when they were first listed.

Status (July 1983): EPA recently completed a remedial investigation at this site as part of the area-wide "Biscayne Aquifer" project. In January 1983, EPA approved $200,000 for a feasibility study of the aquifer. The work is scheduled to be completed in the third quarter of 1983.

Response category / Cleanup status code, October 1984: R

WHITEHOUSE OIL PITS
Whitehouse, Florida

Conditions at listing (October 1981): The Whitehouse Oil Pits are in the suburban community of Whitehouse, Duval County, Florida, about 10 miles west of downtown Jacksonville. The 5-acre site, established in 1958, provided seven pits for waste oil and acid sludges generated by the Allied Petroleum Co., a waste oil recycler. The pits were abandonded in 1968, when Allied declared bankruptcy. After assuming ownership of the property by tax default, the City of Jacksonville installed and operated a treatment and dewatering system at the oil pits. In 1976, the dike around one of the pits ruptured, spilling 200,000 gallons of wastes into wetlands along McGirts Creek. Using $135,000 made available under Section 311 of the Clean Water Act, EPA cleaned up the site. During the cleanup, EPA determined that the highly acidic water, sludges, and waste oil in the pits contained PCBs and heavy metals. EPA also upgraded the treatment system, which the city then used to reduce the effluent PCBs to an acceptable level. The pits were dewatered, packed with various drying materials, and capped. The treatment system was dismantled, and drainage ditches were dug to control ground water in the area. Final monitoring of the test wells and drainage effluents showed low levels of chlorinated organics, heavy metals, and acids.

Status (July 1983): In June 1982, EPA awarded a $306,400 Cooperative Agreement to Florida for: (1) work on the site ditches and dikes to control leachate, (2) a remedial investigation, and (3) a feasibility study to identify alternatives for remedial action at the site. The work is scheduled to be completed in the fourth quarter of 1983.

EPA identified parties potentially responsible for wastes at the site and is seeking their cooperation in the cleanup.

Response category / Cleanup status code, October 1984: R

BELLWOOD GROUND WATER CONTAMINATION
Bellwood, Florida

Conditions at listing (October 1981): The Bellwood Ground Water Contamination Site covers 5 acres near Bellwood, an unincorporated town in rural central Florida. About 5,000 people use ground water in the town, which is 1 mile east of the site. Ground water at the site is shallow and generally moves south to southeast.

Th primary source of contamination is a series of lagoons where Drum Services, Inc., a drum recycler, disposed of rinse water. Arsenic and other metals were found in wells on the Drum Services property close to the lagoons. In November 1980, the lagoons were taken out of service. In August 1981, they were drained and cleaned, and the sludges were taken to a nearby landfill. Drum Services now has a permit to operate a drum reclamation furnace and therefore no longer generates rinse water.

Status (July 1983): In mid-1982, EPA completed geophysical studies and installed and sampled monitoring wells. EPA is currently reviewing the site report. EPA took additional samples at the site at the end of 1982, but analytical results are not yet available. On a recent visit to the site, EPA's Emergency Response Team found an additional drum disposal area.

Response category / Cleanup status code, October 1984: F

HERCULES 009 LANDFILL
Brunswick, Georgia

Conditions at listing (September 1983): The Hercules 009 Landfill covers 16.5 acres several miles north of Brunswick, Georgia. Hercules, Inc., has used 7 acres for disposal of waste water treatment sludge containing toxaphene, a pesticide, from its Brunswick plant. From 1975 to 1980, the landfill operated under a State permit. The permit was revoked in July 1980 when the State discovered elevated levels of toxaphene in drainage ditches around the site. Hercules reports disposing of 19,300 tons of contaminated sludge at the site.

The landfill is in a marshland and is about 1 mile east of coastal wetlands. The site is underlain by several feet of peat and marshland deposits over a shallow sand aquifer. The nearest residential area is 500 feet away. Residential wells in the area generally tap the shallow aquifer, while municipal and industrial wells usually tap the deeper limestone Principal Artesian Aquifer. The two aquifers are separated by a 500-to-600 foot thick confining layer; consequently, only the shallow aquifer is threatened at this time.

Status (June 1984): In October 1983, Hercules installed six monitoring wells around the site in accordance with a State plan for closing the landfill. Since that time, the company has sampled the wells several times and submitted a full geotechnical report and proposed closure plan to the State. The geotechnical data are currently under review to determine adequacy at the closure plan.

Response category / Cleanup status code, October 1984: D

MONSANTO CORP. (AUGUSTA PLANT)
Augusta, Georgia

Conditions at listing (September 1983): From 1966 to 1974, Monsanto Corp. used two areas at its Augusta, Georgia, plant to bury phosphoric acid sludge contaminated with approximately 5 percent arsenic trisulfide. The two areas cover about 0.2 acres, are about 6 feet deep, and are covered by a highly permeable gravel-base material. Landfill No. 1, active from 1966 to 1971, was used to dispose of phosphoric acid sludge containing more than 700 pounds of arsenic. Landfill No. 2, active between 1972 and 1974, received primarily plastic drums of sludge containing some 800 pounds of arsenic.

In June 1979, Monsanto began collecting data from two monitoring wells, one downgradient from each area. From June to November 1979, arsenic levels in the wells ranged from 51 to 165 parts per billion (ppb). The drinking water standard for arsenic is 50 ppb.

There are two aquifers in the area: the shallow Cretaceous Aquifer and the deeper Tuscaloosa Aquifer, which supplies most local drinking water. Most residents use private wells. Gracewood, about 2.5 miles from the site, uses the Tuscaloosa Aquifer to supply its 1,500 residents. Water in the shallow aquifer probably can move to the deeper aquifer because the two appear to be separated by layers of sand.

Status (June 1984): In November 1983, Monsanto completed the removal of contaminated soil from both areas. The State then collected soil samples from the excavated areas and found that arsenic, cobalt, cadmium, barium, and lead are not present in toxic concentrations. In January 1984, after receiving State approval, Monsanto backfilled the excavation. In April 1984, Monsanto expanded the monitoring well system to include several new upgardient wells and began a monthly monitoring program.

Response category / Cleanup status code, October 1984: V

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

POWERSVILLE SITE
Peach County, Georgia

Conditions at listing (September 1983): The Peach County Sanitary Landfill, commonly refered to as the "Powersville Site," covers 15 acres in Peach County, Georgia. It accepted hazardous waste from Woolfolk Chemical Co. from the early 1960s until 1983. Records indicate that wastes containing various pesticides have been disposed of at the site. The site itself is now separated into two portions: a hazardous waste area, which is fenced and posted, and a larger municipal waste landfill. However, the State suspects that hazardous wastes have been buried in both sections.

In April 1983, the State analyzed samples collected from a nearby church well and detected lindane, benzene hexachloride (BHC) and dieldrin. The State requested the church to discontinue use of the well.

The Powersville Site is located in the recharge zone of the Cretaceous Aquifer, the Providence Sand (a major aquifer for local water supplies), and the Gosport Sand. Furthermore, the sandy surface soils permit practically all of the 5 inches of net annual precipitation in the area to go directly into the ground. About 15 private water wells are within 0.3 miles of the site.

Status (June 1984): EPA completed a topographic, geologic, and geophysical study of the site in November 1983. In April 1984, EPA completed installation of a network of monitoring wells. Samples were collected from these wells as well as many private wells. Results are pending.

Response category / Cleanup status code, October 1984: D

ORDOT LANDFILL
Ordot, Guam

Conditions at listing (October 1981): The Ordot Landfill, in Ordot, Guam, has been in use over 40 years, mostly as an open dump. There are no accurate records of what was dumped. The current site occupies 47 acres, and plans call for possible expansion to a total of 74 acres. Surface water from the site drains into the Pago River, which discharges into Pago Bay. Direct human contact and contamination of marine life used for food are of concern.

This is the top priority site in Guam.

Status (July 1983): In July 1982, EPA approved $75,000 for studies of four sites -- Ordot Landfill, PCB Wastes, PCB Warehouse, and Taputimu Farm -- located on islands of the Insular Territories. Another $65,000 were added in November 1982. The funds are for two separate projects. One is to review and compile existing data for the Ordot Landfill, where ground water and surface water may be threatened by hazardous wastes mixed in with municipal wastes. The second is for the other three sites, where wastes are containerized. The funds are for a remedial investigation to determine the type and extent of contamination at each site and a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the third of quarter 1983. The next step, if approved, would be to select the cost-effective remedy and begin design activities. In January 1983, EPA awarded $10,000 to the U.S. Army Corps of Engineers for technical assistance to the project.

Response category / Cleanup status code, October 1984: R

ARRCOM CORP. (DREXLER ENTERPRISES)
Rathdrum, Idaho

Conditions at listing (December 1982): The Arrcom Corp. (Drexler Enterprises) Site covers 1.2 acres about 2.8 miles southwest of Rathdrum, Idaho. For several years, Arrcom recycled waste oils containing solvents, prior to abandoning the site in January 1982. Remaining on-site are 17 partially filled storage tanks, the largest capacity being 45,000 gallons. The contents of most of the tanks have not yet been determined. Chloroform has been found in a soil sample. Wastes processed at the site may have included PCBs. The site sits directly over the Spokane Valley-Rathdrum Prairie Aquifer, which is the sole source of drinking water for 350,000 people in the region.

Status (July 1983): EPA has collected soil samples to document leakage on-site. In addition, EPA sent a team to the site early in June 1983 to sample all tanks, as well as soil and drinking water from surrounding properties. The general condition of the site was also assessed. Subsequent actions will depend largely on the sampling results.

Response category / Cleanup status code, October 1984: R / O

BUNKER HILL MINING & METALLURGICAL COMPLEX
Smelterville, Idaho

Conditions at listing (December 1982): The Bunker Hill Mining and Metallurgical Complex covers 350 acres in Smelterville, Idaho. It smelted lead and zinc for 50 years. In 1981, the plant closed for economic reasons, and in 1982, Bunker Hill's parent company sold the operation to an Idaho consortium. Environmental problems associated with the Bunker Hill operations are of long standing, although there has been improvement in recent years. In 1982, significant numbers of Kokanee trout returned to the South Fork of the Coeur d'Alene River, which had been totally devoid of fish below Kellogg for many years. Improved conditions can be attributed to Bunker Hill's installation of treatment facilities for wastes that once were discharged untreated into the river. Because of elevated levels of lead in the blood of children around Kellogg, airborne lead was a cause for alarm in the early 1970s. Control measures subsequently taken by the company reduced lead blood levels from what they were a decade ago.

Several factors contribute to continuing environmental concern, including: accumulations of lead in soil and dust around the complex, hazardous wastes in a storage pond on the property, residues of heavy metals in the South Fork of the Coeur J'Alene, and heavy metals contamination in the aquifer downgradient of the site.

Status (July 1983): Economic considerations will determine if and when full-scale operations of the Bunker Hill complex resume. Environmental controls will be a factor in those considerations. EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

PACIFIC HIDE & FUR RECYCLING CO.
Pocatello, Idaho

Conditions at listing (September 1983): The Pacific Hide & Fur Recycling Co. occupies about 10 acres near a residential area in Pocatello, Idaho. For several years prior to 1983, the company buried PCB capacitors (previously there) and PCB oils from transformers on this property. In March 1983, EPA conducted an emergency cleanup of the site at a cost of $350,000. A large number of buried PCB capacitors were recovered and incinerated, and PCB contaminated soil was disposed of. The area where the PCBs were found has been fenced. The site sits over an aquifer that feeds private drinking wells and an industrial well of a nearby malt mill. Pocatello has seven drinking water wells within 3 miles of the site.

EPA made a preliminary survey of the entire site to assess PCB contamination of soils and collected samples from nearby drinking and industrial wells.

Status (June 1984): EPA is pursuing both civil and criminal enforcement actions against the company. A criminal jury trial reached a guilty verdict against two of three defendants. Sentences were passed on June 29, 1984. Motions for discovery in the civil action for cost recovery have begun.

Any actions to be taken at this site will be coordinated with actions at the Union Pacific Railroad Co. Site, which is adjacent.

Response category / Cleanup status code, October 1984: R F / O

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

UNION PACIFIC RAILROAD CO.
Pocatello, Idaho

Conditions at listing (September 1983): For an unknown number of years, Union Pacific Railroad Co. has dumped sludge from its oil/water separation plant into what appears to be a 150-foot by 40-foot unlined man-made pond, in Pocatello, Idaho. The 0.5-acre pond is just north of Union Pacific's West Pocatello Railroad Yard, which covers a few hundred acres. For some time, Union Pacific has said it plans to construct a sludge-thickening facility to replace the pond. Several years ago, Union Pacific also treated rail ties, probably with pentachlorophenol (PCP), at an unknown location in the yard.

In 1980, the State sampled wells in the vicinity, detecting PCP in parts per trillion, and oils and grease in parts per million (ppm). PCBs were not detected. In March 1983, EPA found 9 ppm PCP in the sludge in the pond and 4.5 ppm in the liquid. These levels are considered a potential source of ground water contamination, but to date no PCP has been found in drinking water samples. Samples collected at the same time from private wells adjacent to the site were contaminated with PCBs. Additional information is needed to further evaluate the yard's contribution, if any, to soil and ground water contamination.

Status (June 1984): Any actions to be taken at this site will be coordinated with actions at Pacific Hide & Fur Recycling Co., which is adjacent.

Response category / Cleanup status code, October 1984: D

A&F MATERIALS RECLAIMING, INC.
Greenup, Illinois

Conditions at listing (July 1982): The A&F Materials Reclaiming, Inc., Site occupies 3.8 acres in Greenup, Illinois. The City of Newton periodically withdraws drinking water from the Embarras River downstream of the site. On-site are four lagoons which hold a mixture of waste oils, sludges, spent caustics, spent acids, water, and other waste products containing PCBs. Similar products containing PCBs are stored in 13 steel tanks on-site, some of which have leaked on several occasions. The site contains about 1.4 million gallons of contaminated water, 16,000 gallons of contaminated oil, and 800,000 gallons of contaminated sludge and soil.

Operations at the site began during 1977 and ended June 1980. They were originally intended to reprocess waste oils and sludges. The storage lagoons were filled by March 1978 and began to overflow, contaminating the environmental pathways leading to the Embarras River 1,300 feet away. PCBs have been found in the lagoons, tanks, ditch, Embarras River, site soils, and ground water beneath the site. Significant concentrations of other compounds and heavy metals have also been detected.

In mid-1980, using $240,000 made available under Section 311 of the Clean Water Act, EPA lowered the level of waste in the lagoons, in addition to building dikes and trenches and removing wastes.

Status (July 1983): In May and December 1982, and in March 1983, CERCLA emergency funds were used to again lower the level in the lagoons, to reinforce the containment dikes, and to take measures to permanently contain the wastes. The total cost was $190,000.

In June 1983, EPA awarded a $277,727 Cooperative Agreement to Illinois to conduct a remedial investigation/feasibility study of contaminated ground water.

The Department of Justice, on behalf of EPA and the State of Illinois, has brought a Federal civil action seeking injunctive relief against parties potentially responsible for wastes associated with this site.

Response category / Cleanup status code, October 1984: V R F S / O

ACME SOLVENT RECLAIMING, INC.
Morristown, Illinois

Conditions at listing (July 1982): The Acme Solvents Reclaiming, Inc., Site covers 20 acres in a rural area of Winnebago County, about 1.5 miles from Morristown, Illinois. Starting in 1960, Acme reclaimed waste solvents through distillation. Still bottom material and waste drums, both full and empty, were disposed of into numerous shallow unlined pits. In late 1972, the State started an administrative action requiring Acme to stop its disposal operations. In 1973, the waste ponds were covered over, although partially buried drums are still visible.

Monitoring by the State and county, which started in April 1981, detected low levels of organic compounds, including trichloroethylene, methylene chlorids, and tetrachloroethylene, in shallow private wells. Four private wells were closed, and the residents began to use bottled water. The shallow aquifers are hydrologically connected to the deeper, highly productive aquifers that supply water to larger industrial and municipal wells in the Rockford vicinity.

Status (July 1983): In August 1982, EPA issued Notice Letters requesting that the owners of Acme undertake a hydrogeologic investigation at the site. Acme declined. In June 1983, EPA awarded a $292,365 Cooperative Agreement to Illinois for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. The work is scheduled to be completed in the second quarter of 1984.

Response category / Cleanup status code, October 1984: R

BELVIDERE MUNICIPAL LANDFILL
Belvidere, Illinois

Conditions at listing (December 1982): The Belvidere Municipal Landfill covers 11.3 acres in Belvidere, Boone County, Illinois. It was active from 1939 until September 1973. When it closed, the site was inadequately covered with sandy soil excavated from a borrow pit and soil left over from highway construction just south of the facility. The site is incompletely fenced and mostly overgrown with natural grasses. Leachate streams are visible on the west and northwest sides of the fill.

Monitoring wells installed by the State detected PCBs, toluene, xylenes, and other toxic organic compounds. A puddle beneath one of the leachate plumes on the northwest side of the fill contains relatively high concentrations of ethyl benzene and toluene.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

BYRON SALVAGE YARD
Byron, Illinois

Conditions at listing (December 1982): The Byron Salvage Yard occupies 10 acres just east of Byron, Illinois, in the 2,200-acre drainage basin of Woodland Creek. The flow of the creek is such that any leachate from the site drains into the creek and contaminates the ground water below. In 1974, the State filed a complaint charging the owners of Byron Salvage Yard with water pollution. The State continued to monitor in and around the yard until the end of 1981. The results revealed that cyanide-containing plating waste had been sprayed onto the roads in and around the salvage yard, and that plating wastes and other wastes, either bulk or in containers, had been dumped and buried in the yard. These activities resulted in high concentrations of cyanide and toxic metals in soils, surface water, and ground water.

Status (July 1983): In April 1983, EPA signed a $248,393 Cooperative Agreement with Illinois for a remedial investigation to determine the type and extent of the contamination at the site and a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the first quarter of 1984.

Response category / Cleanup status code, October 1984: R / I

CROSS BROTHERS PAIL RECYCLING
Pembroke Township, Illinois

Conditions at listing (December 1982): The Cross Brothers Pail Recycling Site covers 20 acres in rural Pembroke Township, 15 miles southeast of Kankakee, Illinois. Between 1961 and 1980, pails and drums were recycled at the site by burning out the residue using hazardous waste solvents as fuel, and then sand blasting and painting. During these operations, soil and ground water became contaminated. Investigations by the State discovered over 10,000 5-gallon pails (mostly empty), 10 acres of contaminated soil, at least 10 covered trenches of unknown wastes, and a plume of contaminated ground water leaving the site. The State has notified four families with downgradient wells that their water supplies are contaminated with a number of toxic organic chemicals. The State completed a hydrogeological study of the site in 1981. On Aug. 19, 1980, the Kankakee County Circuit Court ordered the site owners to cease operations and clean up the surface debris

Status (July 1983): In May 1983, EPA signed a $220,871 Cooperative Agreement with Illinois for a remedial investigation to determine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the first quarter of 1984.

Response category / Cleanup status code, October 1984: R

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

GALESBURG/KOPPERS
Galesburg, Illinois

Conditions at listing (December 1982): The Galesburg/Koppers Site covers 400 acres outside Galesburg, Knox County, Illinois. Koppers Co. treats railroad ties on the site, which is owned by Burlington Northern Railroad. The plant has been in operation since 1907. In the past, waste water containing creosote and pentachlorophenol was discharged to four unlined ponds on-site, resulting in contamination of the shallow aquifer. Contamination has not been detected so far in the deeper aquifer or in the many private drinking water wells in the area. In 1977, the State required the company to prevent leaching oily materials from entering a nearby ditch. In response, the company dug an intercepting ditch and dammed off the existing ditch. Thousands of gallons per year of oily waste are recovered from the intercepting ditch. In about 1979, two of the three creosote ponds were filled in.

Status (July 1983): The company is negotiating with the State for cleanup of former disposal areas as well as treatment of current waste water. The company, after completing a hydrogeological study and preparing a ground water monitoring report, is taking additional ground water samples.

In June 1983, EPA completed a draft remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. The plan is now under review. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

JOHNS-MANVILLE CORP.
Waukegan, Illinois

Conditions at listing (December 1982): The Johns-Manville Corp. Site covers about 350 acres on the shore of Lake Michigan, north of Waukegan, Illinois. On the site is a 970,000-cubic-yard pile of asbestos wastes. Significant levels of asbestos have been found in downwind air samples. The State has noted violations of the Illinois Environmental Protection Act regarding operation of the waste pile.

Status (July 1983): EPA and the State are currently developing the scope of work for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: V F

LASALLE ELECTRICAL UTILITIES
LaSalle, Illinois

Conditions at listing (December 1982): The LaSalle Electrical Utilities Site covers about 4 acres just north of LaSalle, Illinois. From the late 1940s to late 1978, capacitors containing PCBs were manufactured on the site. The company reportedly used waste oils to control dust in the parking lot until 1969. More than 1,000 parts per million PCBs remain in the soil throughout the site. Warning signs, a three-strand barbed wire fence, and a gate have been installed around the site. In August 1982, EPA installed four on-site monitoring wells.

Status (July 1983): EPA recently completed a draft remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. The plan is now under review. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

OUTBOARD MARINE CORP.
Waukegan, Illinois

Conditions at listing (October 1981): From 1959 to 1971, the Johnson Motors Division of Outboard Marine Corp. (OMC) in Waugekan, Illinois, purchased about 9 million pounds of PCBs. The material was used in aluminum die cast machines, which routinely leaked. In 1976, the company was found to be discharging PCBs into the Waukegan Harbor and the North Ditch; both feed into Lake Michigan. This finding was of great concern because a number of Lake Michigan fish species contain PCBs in quantities exceeding Food and Drug Administration guidelines. EPA and the State issued administrative orders requiring that the company take certain steps to eliminate discharges of PCBs. Although those steps were taken and discharges significantly reduced, a great deal of PCBs had been released to the environment.

In 1976, EPA began studies to determine the nature and extent of the PCB problem. The studies show that PCBs are distributed throughout the sediments of Waukegan Harbor, with the highest concentrations in Slip 3. About 11,000 cubic yards are at a concentration of 500 parts per million (ppm) or more, about 50,000 cubic yards beyond 50 ppm, and substantially more greater than 10 ppm. In addition, the flowing waters in the ditch annually carry sediments containing 11 pounds of PCBs into the lake. A parking lot next to the lake shore is contaminated.

In 1978, with a special $1.5 million appropriation from Congress, EPA's Region V Office investigated the extent of contamination and identified options for cleanup. In 1980, an additional $436,000, made available under Section 311 of the Clean Water Act and the Resource Conservation and Recovery Act, were used to study the site.

Following a breakdown of negotiations between Illinois and OMC, the Department of Justice, on behalf of EPA, filed a Federal civil action seeking injunctive relief against parties potentially responsible for wastes associated with the site.

This is the top priority site in Illinois.

Status (July 1983): In February 1983, EPA approved $100,000 to do a feasibility study, largely based on existing data, to identify alternatives for remedial action at the site. A decision on the final remedy is scheduled for the third quarter of 1983.

Response category / Cleanup status code, October 1984: R F S

VELSICOL CHEMICAL CORP. (MARSHALL PLANT)
Marshall, Illinois

Conditions at listing (December 1982): The Velsicol Chemical Corp. Site covers 20 acres about 1 mile north of Marshall, Clark County, Illinois. In the 1930s, the company built a plant there to produce resins. In 1946, the plant started to manufacture chlordane. In 1950, the company shut down its two resin units, but continued to produce the pesticide.

In the early years of operation, process waste waters were discharged from the plant without treatment. In 1965, an injection well was installed for disposal of both waste water and storm run-off. A second well was installed in 1973. These wells, under permit from the State, continue in operation. Part of the injection well system consisted of surface impoundments known as Ponds 5/6, which are now inactive. These ponds contain about 105,000 cubic yards of chlordane and sludge contaminated with hexachlorocyclopentadiene.

The surface impoundments have overflowed during heavy rain, and chlordane-related compounds have been detected in a drainage ditch and two monitoring wells. Analyses of water from wells adjacent to the impoundments strongly suggest that shallow ground water beneath the plant area is being polluted with chlordane-related compounds. Mill Creek, its tributaries, and the Wabash River are similarly contaminated.

Status (July 1983): The State and Velsicol are negotiating for the cleanup of Ponds 5/6.

Response category / Cleanup status code, October 1984: D

ational Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

WAUCONDA SAND & GRAVEL
Wauconda, Illinois

Conditions at listing (July 1982): The Wauconda Sand & Gravel Site covers 80 acres in Lake County, Illinois, about 2 miles north of Wauconda and 3 miles east of Island Lake. The site, originally a sand and gravel pit, accepted wastes from 1950 to 1978, when it was closed and covered. The northern two-thirds of the site was filled prior to the State's landfill regulations and was never permitted. A 9-acre portion in the southern third of the site was permitted to accept general refuse. Leachate from the landfill has contaminated both ground water and surface water in the vicinity. Samples from monitoring and private wells contain low levels of contaminants at this time, including ammonia, boron, chloride, iron, phenols, PCBs, and 2,4-dimethylphenol. Leachate contaminated by low levels of PCBs has also been detected entering Mutton Creek north of the landfill.

Status (July 1983): In June 1983, EPA started a remedial investigation/ feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. The work is scheduled to be completed in the second quarter of 1984.

Response category / Cleanup status code, October 1984: R

AMERICAN CHEMICAL SERVICE, INC.
Griffith, Indiana

Conditions at listing (September 1983): American Chemical Service, Inc., recycled chemicals in Griffith, Indiana, from 1958 to 1975, when it voluntarily stopped using two disposal areas on-site and covered them. The State has responded to complaints about the company since 1972. The site contains buried drums (estimated at 20,000) and sludges (primarily pigment and resins); the amounts, nature, and source are unknown.

The shallow aquifer beneath the site is contaminated with pentachlorophenol, benzene, toluene, vinyl chloride, 1,1,1-trichloroethylene, and other organic compounds, according to analyses conducted for the State. The majority of the 10,000 people residing within 3 miles of the site obtain drinking water from the lower aquifer. No contamination of drinking wells has been documented to date. The aquifers are separated by a supposedly continuous 15-to-25 foot layer of clay. The site is entirely mantled by sandy soil with high permeability. Ground water flows primarily to the northwest.

Status (June 1984): EPA has completed a search for parties potentially responsible for wastes associated with the site.

Response category / Cleanup status code, October 1984: D

BENNETT STONE QUARRY
Bloomington, Indiana

Conditions at listing (September 1983): The Bennett Stone Quarry is about 1 mile northwest of Bloomington, Indiana. In April 1983, the Monroe County Health Department defined an area of several acres that had been used for dumping of electrical parts, including a large number of PCB-contaminated capacitors. Labels identified them as Westinghouse Type FP Outdoor capacitors. Soils adjacent to the capacitors are stained with oil, and the entire fill area is generally void of vegetation. Two ponds along the west border of the site have oil sheens. Both drain into Stout Creek. The State detected PCBs in soil (maximum of 38% Aroclor 1248), stream sediments, and surface water. Pond sediments on the west side contain high levels (102 parts per million) of Aroclor 1242. This site is located in a region where limestone is extensively quarried for building stone. The population immediately surrounding this site generally depends on wells, but no drinking water contamination has been documented to date.

In July 1983, EPA completed a three-phase emergency cleanup, which involved (1) removal and disposal of capacitors on the surface and contaminated soils, (2) an aerial photographic survey, geophysical study, and soil sampling, (3) placement of an impervious cap over the site to prevent run-off of contaminants, and (4) construction of security fencing around the site. The total cost was $225,000 in CERCLA emergency funds.

Status (June 1984): Negotiations are underway with Westinghouse to determine what further remedial measures are necessary at this site and four other PCB disposal sites in the Bloomington area. A trial originally scheduled for January 1983 has been stayed pending negotiations. Negotiations concerning a Consent Decree are underway.

The extent of the contamination was established in May 1984.

Response category / Cleanup status code, October 1984: S / O

ENVIROCHEM CORP.
Zionsville, Indiana

Conditions at listing (December 1982): Envirochem Corp. owned and operated a waste storage and recycling business on 6 acres in Boone County, Zionsville, Indiana. The site is adjacent to the Northside Landfill. The facility recovered solvents and oils from industrial sources from 1977 until May 1982, when it was closed under a Court Order obtained by the State. The companay's on-site storage practices resulted in an inventory beyond that needed to maintain recycling operations. Thus, when the company went into receivership, over 20,000 drums and 400,000 gallons of waste remained on-site. On one occasion, this excessive inventory resulted in an overflow of contaminated rain water from a holding pond into an unnamed ditch that flows to Findley Creek, causing an oil sheen on Findley and Eagle Creeks. Some drums stored in the open and without an impermeable base deteriorated. In 1981, three organic solvents (1,1-dichloroethane, trichloroethene, and 1,1,1-trichloroethane) were found in on-site wells.

Status (July 1983): In February 1983, EPA signed a $310,200 Superfund State Contract with Indiana. Under the contract, EPA completed a limited feasibility study that recommends off-site disposal of all drum and tank wastes, plus on-site treatment with off-site disposal of contaminated rain water. In addition, due to the deteriorating conditions at the site, EPA has taken emergency measures to stabilize the site. Concurrently, EPA is conducting a remedial investigation and feasibility study to determine the cost-effective remedy for dealing with contaminated soils and ground water.

Response category / Cleanup status code, October 1984: V R F S / O

FISHER-CALO
LaPorte, Indiana

Conditions at listing (December 1982): Fisher Calo Chemicals and Solvents Corp. (Fisher-Calo) has reclaimed solvents on a 34-acre site near LaPorte, Indiana, since late 1972. Wastes were buried on-site in over 10,000 drums. As a result of spills, burial of drums and wastes, and a large fire in March 1978, ground water became contaminated.

In July 1980, the Department of Justice, on behalf of EPA, brought a Federal civil suit seeking injunctive relief against the owner and operator for improper disposal of drummed waste. The drums were excavated immediately prior to the suit. The company entered into a Consent Agreement on Aug. 4, 1982, to monitor quarterly to determine if contaminants, including 1,1-dichloroethene, trichloroethene, and tetrachloroethene, have naturally dissipated to acceptable levels.

Status (July 1983): Fisher Calo is continuing to monitor three wells and report the results to EPA. After four quarters of monitoring, EPA will determine if there is a need for further remedial action.

Response category / Cleanup status code, October 1984: F

LAKE SANDY JO (M&M LANDFILL)
Gary, Indiana

Conditions at listing (December 1982): The Lake Sandy Jo (M&M Landfill) Site covers 55 acres in Gary, Lake County, Indiana. The site was a large pit that had provided fill to build the Tri-State Highway. For several years, the pit was filled with water and was known as Lake Sandy Jo. It was emptied and in 1970, according to the present owner/operator, filling began. Demolition wastes were put in the pit, and there are records of hazardous waste disposal. The present owner states that "midnight dumping" occurred frequently, and the site had been plagued by above- and below-ground fires. EPA detected benzene, toluene, and tetrachloroethylene in ground water and surface water. Ground water contamination is the primary concern because the area is surrounded on all sides by houses. Over 5,000 people living within 3 miles of the site draw water from more tha 1,400 wells.

Status (July 1983): EPA recently completed a draft remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

LEMON LANE LANDFILL
Bloomington, Indiana

Conditions at listing (December 1982): Lemon Lane Landfill is located on the western edge of Bloomington, Indiana. The site is 10.7 acres, of which 3 acres are owned by a private citizen. From 1950 to 1964, the site, which has no liner or run-off controls, accepted both municipal and industrial wastes. Allegedly, wastes were incinerated on-site. No records were kept of the types or quantities of wastes received. Of primary concern are large quantities of exposed capacitors containing PCBs. Many are leaking and have contaminated underlying soils, which are thin and irregular. PCBs in the soil range from 0.1 to 330,000 parts per million. Starting in 1980, the State and EPA sampled several times in the area. They detected no PCBs in nearby residential wells at the time, nor did they observe any surface discharges. However, the geology of the area suggests that ground water contamination is possible. Pedestrians have easy access to the site, and children use it as a play area.

Status (July 1983): Using CERCLA emergency funds, Bloomington is working with EPA to erect a security fence around the site.

Response category / Cleanup status code, October 1984: R S / I

MAIN STREET WELL FIELD
Elkhart, Indiana

Conditions at listing (December 1982): The Main Street Well Field supplies water to Elkhart, Indiana. Of the city's 21 production wells, the field has 15, providing 70 percent of the city's drinking water. Christiana Creek is diverted to numerous ponds, which recharge the shallow aquifer. All production wells drain from this aquifer. Infiltration from the ponds is rapid. Though St. Joseph River is the main discharge point for the area, most of the ground water in the Main Street Well Field discharges to Christiana Creek.

Of the 15 wells, 5 are contaminated with from 50 to 880 micrograms per liter of trichlorethene (TCE). The contamination was discovered in April 1981. Sampling continued through 1982. Elkhart took several steps that reduced TCE levels in the immediate vicinity of the well field and maintained adequate water supplies.

Status (July 1983): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

MARION (BRAGG) DUMP
Marion, Indiana

Conditions at listing (December 1982): The Marion (Bragg) Dump covers 40 acres in Marion, Grant County, Indiana. The area is relatively flat, with the Mississinewa River within 200 yards. The landfill, originally an old gravel pit, was used for the disposal of various wastes until it was closed and covered in 1975. The State reports that for at least 2 years, the landfill received approximately 1,400 drums per month. At least 3,000 drums containing a variety of hazardous materials such as acetone, solvents, plasticizers, lead, and cadmium may be buried.

Leachate has been observed on the southeast side of the landfill. The primary concern is the threat of ground water contamination. Approximately 3,000 people live within 1 mile of the site and draw their water from an aquifer 20 to 25 feet below the site. To date, contamination has not been detected in wells in the immediate area.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions of the site.

Response category / Cleanup status code, October 1984: D

MIDCO I
Gary, Indiana

Conditions at listing (December 1982): The Midwest Solvent Recovery Co. (MIDCO) I Site occupies 4 acres in an area of wetlands in Gary, Indiana. In April 1975, the company began storing and reclaiming thousands of drums of hazardous wastes on-site. The company apparently also dumped sludges and other wastes into a pit on the site. In December 1976, a fire destroyed more than 14,000 drums, essentially halting operations. In 1977, operations started up again and continued until 1979. Several thousand drums containing materials such as paint sludges, solvents, acids, caustics, and cyanides were left on-site, many of them leaking and deteriorated. The drums burned in the 1976 fire also remained. Surface water, ground water, and soils are contaminated.

In June 1981, using $10,829 made available under Section 311 of the Clean Water Act, EPA fenced the site. In February 1982, with $995,000 in CERCLA emergency funds, EPA removed the wastes and about 1 foot of soil, and placed a temporary clay cap on the site. These efforts alleviated the threats of fire, explosion, and human contact.

The Department of Justice, on behalf of EPA, has brought a Federal civil action seeking injunctive relief against parties potentially responsible for wastes associated with this site.

Status (July 1983): EPA recently prepared a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R F / O

NEAL'S LANDFILL (BLOOMINGTON)
Bloomington, Indiana

Conditions at listing (October 1981): Neal's Landfill covers about 18 acres 4.5 miles west of Bloomington, Indiana. The site was used as an industrial and municipal waste landfill from 1950 to 1972. The main fill area measures about 300 by 300 yards. Later, the landfill was used as pasture for beef cattle. A number of springs surface near the site and flow 0.8 miles to Richland Creek, a tributary of the White River.

In 1966 and 1967, capacitors and arrestors containing PCBs, as well as PCB-contaminated capacitor insulation material, rags, and filter clay, were disposed of at the landfill. Capacitors and other contaminated materials are visible on the surface. PCBs have been found in surface soils in the northeast portion of the landfill, the springs near the site, sediments of Richland Creek, and fat from a calf that had grazed on the site.

Status (July 1983): On Jan. 4, 1983, the Federal government filed a lawsuit against Westinghouse Electric Corp. under CERCLA and the Resource Conservation and Recovery Act seeking preliminary and permanent injunctive relief. Negotiations as to settlement of a preliminary injunctive motion are continuing. The main case is set for trial on Oct. 25, 1983.

Response category / Cleanup status code, October 1984: V F S

NINTH AVENUE DUMP
Gary, Indiana

Conditions at listing (December 1982): The Ninth Avenue Dump covers 20 acres in Gary, Indiana, in a flat marsh area that has been partially filled in. Operations started in 1973 and ended in 1980. In 1975, the State documented the presence of an estimated 10,000 55-gallon drums (many of them empty) and found evidence suggesting that liquid wastes had been dumped on-site and allowed to percolate through the sandy soil. A State inspector estimated that 500,000 gallons of liquid industrial waste had been dumped and 1,000 drums buried on-site. Analyses identified the presence of various organic compounds and heavy metals. When operations stopped in 1980, over 250 deteriorating drums and six old tank trucks remained above ground.

In the fall of 1980, the Department of Justice, on behalf of EPA, brought a Federal civil action seeking injunctive relief under the Resource Conservation and Recovery Act against the owners and operators of the site.

Status (July 1983): EPA and one of the responsible parties have negotiated a plan for site cleanup. Phase I calls for removal of the drums, tank trucks, junk, and grossly contaminated soils. All containerized wastes have been tested and classified, but removal of the remaining drums, trucks, and surface soil has been delayed because of problems in obtaining State permits for disposal. Contaminated surface soil has been scraped into a pile and covered with a plastic sheet.

Phase IIA includes studying subsurface conditions and recommending remedial actions. Various organic compounds have been detected in the shallow aquifer at both the parts-per-million and parts-per-billion ranges. Contamination of drinking water has not been detected at this time. Negotiations for Phase IIA are underway, and the trial is set for October 1983.

Response category / Cleanup status code, October 1984: V

NORTHSIDE SANITARY LANDFILL, INC.
Zionsville, Indiana

Conditions at listing (September 1983): The Northside Sanitary Landfill, Inc., Site covers 131 acres in Zionsville, Indiana. Over 16 million gallons of hazardous wastes have been deposited in the landfill. It opened in the 1950s as an open dump, and was permitted by the State in 1971 to accept hazardous wastes.

EPA (under Section 311 of the Clean Water Act) and the State have responded to complaints about the site. In response, the owner installed a leachate collection system, but leachate is still not totally contained. Analyses of surface water and soil by the State detected organic chemicals, including benzene, acetone, xylene, phenol, and chloroform, as well as lead. If the leachate collection system is not pumped out properly, it can overflow into ground water. The clay liner of the landfill may not be continuous, thus threatening ground water. About 1,750 residents within 3 miles of the site use wells for drinking water.

In June 1983, the State ordered the site to close. The corporation has appealed the action.

Status (June 1984): EPA has started a remedial investigation/feasibility study to determine the type and extent of contamination at the site and to identify alternatives for remedial action.

Administrative hearings are underway regarding the State's closure order.

Response category / Cleanup status code, October 1984: F

POER FARM
Hancock County, Indiana

Conditions at listing (September 1983): Poer Farm covers 5 acres on a slight knoll between two streams near Wilkinson in Hancock County, Indiana. In 1973-74, the site received and stored on the ground 275 drums of paint wastes. The drums are leaking, and vegetation nearby is dead. EPA analyzed the drums and soils and detected toluene, xylene, ethyl benzene, chromium, arsenic, and lead. Ground water provides drinking water for about 2,400 people within 3 miles of this site. An on-site well is contaminated by arsenic, cadmium, and lead.

In June 1983, EPA used about $100,000 in CERCLA emergency funds to alleviate the fire and explosion hazard at the site. All of the drummed materials and contaminated soils were removed and properly disposed of. The on-site well was resampled.

Status (June 1984): EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and to identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R / 0

REILLY TAR & CHEMICAL CORP. (INDIANAPOLIS PLANT)
Indianapolis, Indiana

Conditions at listing (September 1983): The Reilly Tar & Chemical Corp. Site covers about 125 acres in a densely populated residential and industrial part of Indianapolis, Indiana. Between the 1920s and 1972, the company operated, on the south portion of the site, a coal-tar refining and wood-treatment facility using creosote. On-site are a trench, a landfill, and lagoons used to dispose of wastes containing pyridine, a toxic organic chemical. Citizens have complained frequently of headaches, general ill health, and increased cancer and birth defects. Ground water is contaminated with pyridine, according to analyses conducted by EPA. About 5,200 residents within 3 miles of the site use ground water for drinking.

Status (June 1984): EPA has prepared a work plan for a remedial investigation/ feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: F

SEYMOUR RECYCLING CORP.
Seymour, Indiana

Conditions at listing (October 1981): The Seymour Recycling Corp. Site occupies nearly 14 acres in an industrial park, 2 miles from the center of Seymour, Indiana. The facility, now abandoned, once reclaimed industrial wastes. Operations began in 1969, when the Seymour Manufacturing Co. moved its Chemical Division to land it leased in the industrial park. In 1976, the Chemical Division was incorporated into Seymour Recycling Corp. under the ownership of Seymour Manufacturing. In 1978, the site was sold to the Envrionmental Processing Corp. Because of numerous permit violations, the State closed the site in February 1980. Remaining on-site were about 60,000 drums and 98 bulk storage tanks containing wastes such as solvents, phenols, cyanides, acids, and C-56 (a pesticide by-product), as well as hundreds of small containers of hazardous materials, primarily from laboratory operations. Some wastes were highly explosive. Soil and ground water off-site are contaminated.

EPA undertook emergency actions beginning in March 1980, using $2 million made available under Section 311 of the Clean Water Act. The actions included: installation of a dike around the site; installation of a carbon unit to treat surface water on-site; sampling and testing of drums, tanks, soil, and water; restaging of approximately 45,000 drums to more secure areas; installation of security fencing; cleanup of a spill of 3,000 gallons of chromic acid; and removal of liquids from the bulk storage tanks. During this time, two wastes generators removed wastes from the site.

In May 1980, the Department of Justice, on behalf of EPA, brought a Federal civil action seeking injunctive relief against parties responsible for wastes associated with this site.

This is the top priority site in Indiana.

Status (July 1983): In August 1982, EPA signed a $12,000 Superfund State contract with Indiana for initial remedial measures involving upgrading and repairing of the on-site system for treating surface water.

In October 1982, EPA negotiated a $7.7 million agreement with 24 generators to undertake a complete surface cleanup at the site. The cleanup is scheduled to be completed in the fourth quarter of 1983. An additional group of generators has committed over $4 million to a "cash-out" settlement agreement for the cleanup.

Suit will be brought by the end of 1983 against a group of parties who have not settled. Also, EPA is planning a remedial investigation to determine the extent and type of subsurface contamination at the site.

Response category / Cleanup status code, October 1984: V R F / O

WAYNE WASTE OIL
Columbia City, Indiana

Conditions at listing (December 1982): Wayne Waste Oil, a division of Wayne Reclamation and Recycling, Inc., owns a 27-acre site in Columbia City, Whitley County, Indiana. From 370,000 to 1.4 million gallons of wastes were dumped on the surface, into unlined pits, and into a trench. Analyses indicate high levels of cyanides, lead, chromium, and zinc.

The site is bordered by residences and a lumber yard on two sides, and a bend of the Blue River on the other two sides. Three public wells are located within 220 yards of the site. The primary concern is the threat to ground water. There are open leaking drums on-site and waste areas that have been covered with sand, as evidenced by disturbed surface soils.

Status (July 1983): The State is performing a health risk assessment on the site. The final report is due in late 1983.

Response category / Cleanup status code, October 1984: R S

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/"Superfund")

WEDZEB ENTERPRISES, INC.
Lebanon, Indiana

Conditions at listing (December 1982): The Wedzeb Enterprises, Inc., Site consists of two warehouses in Lebanon, Indiana. They were used to store capacitors, many containing oils, for subsequent distribution and resale. In May 1981, a fire destroyed one warehouse, which contained about 50,000 capacitors, and caused the release of PCBs and low levels of dioxin and tetrachlorodibenzofuran (TCDF) into the immediate environment. The PCB-contaminated warehouse debris remains on the site, which is neither secured nor posted. There is no protection from wind and precipitation. State and Federal investigators sampled the site on several occasions, beginning in May 1981. Most samples from the warehouse rubble contained more than 500 parts per million (ppm) PCBs; one contained 24,500 ppm. Dioxin and TCDF were in concentrations (30 to 500 parts per trillion) that could not adversely affect human health. Low concentrations of PCBs were detected in Prairie Creek. PCBs may have contaminated sludge from the Lebanon sewage treatment plant via a basement drain (later sealed) in the warehouse. Ground water is threatened because on-site soil is permeable, as is the aquifer 100 feet below.

In June 1981, the State requested that the principal owner of Wedzeb submit a proposal for cleanup and disposal. The situation was referred to the State Attorney General for action in October 1981.

Status (July 1983): The Indiana State Board of Health is discussing cleanup requirements with the owner.

Response category / Cleanup status code, October 1984: D / I

AIDEX CORP.
Council Bluffs, Iowa

Conditions at listing (October 1981): A pesticides-formulating plant near Council Bluffs, Iowa, belonging to Aidex Corp., caught fire in 1976. The 100,000 gallons of water used to fight the fire contaminated the ground on the 15-acre site. The company filed for bankruptcy in 1980. More than 4,000 barrels of pesticides and pesticide wastes are stored and buried on the property. A large under-ground tank and concrete pit on the site also contain wastes. Soil, ground water, and surface water are contaminated.

This is the top priority site in Iowa.

Status (July 1983): In December 1981, EPA fenced the property with $30,000 in CERCLA emergency funds. In August 1982, EPA authorized $200,000 for a remedial investigation to determine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the third quarter of 1983. In September 1982, EPA signed a Superfund State Contract and interagency agreement with the U.S. Army Corps of Engineers for $465,000. In March 1983, the funding was increased to $680,000 to cover initial remedial measures to clean up surface soils and drums, empty the tank and pit, and control erosion from areas with highly contaminated soils. A contractor for the cleanup was hired in April 1983. The work is scheduled to be completed in early fall of 1983.

The Department of Justice, on behalf of EPA, has brought a Federal civil action seeking injunctive relief against parties potentially responsible for wastes associated with the site.

Response category / Cleanup status code, October 1984: R F / O

DES MOINES TCE
Des Moines, Iowa

Conditions at listing (December 1982): The Des Moines TCE Site consists of a plume of ground water contaminated with trichloroethylene (TCE) southwest of downtown Des Moines, Iowa, along the Raccoon River. EPA installed several monitoring wells to locate the source or sources of the chemical, centering its initial investigation around the Dico Co. TCE was first detected in ground water beneath the Dico property in 1978. Dico used TCE to degrease metal parts and in the past spread the oily wastes from this process on its property to control dust. Early in 1979, the company voluntarily stopped this procedure.

This site was once listed under the name "Dico."

Status (July 1983): Recently EPA reconfirmed TCE at Dico but is investigating other potential sources as well. Also, EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: F

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

LABOUNTY SITE
Charles City, Iowa

Conditions at listing (December 1982): The LaBounty Site occupies 8.5 acres on the Cedar River floodplain at the southern edge of Charles City, Iowa. From 1953 to 1977, Salsbury Laboratories, a manufacturer of veterinary pharmaceuticals, disposed of 6.4 million cubic feet of arsenical sludge and organic wastes on the site. Leachate from the site is contaminated with 36 chemicals, some containing metals. Leachate-contaminated ground water discharges from a shallow aquifer into the Cedar River, but the deeper aquifer is not presently contaminated. The river and the deeper aquifer combined supply drinking water to more than 300,000 people, about one-third of Iowa's population.

In 1977, Iowa issued an administrative order that required the company to prevent run-off, cease operations, and submit a plan for removal of wastes. EPA also issued an adminstrative order requiring the company to take interim remedial measures. In response, the company installed a ground water monitoring system, capped the site, and took measures to reroute and divert run-off.

Status (July 1983): The State and EPA are evaluating monthly ground water and surface water monitoring data to assess the effectiveness of the company's interim remedial measures and determine if additional remedial action is necessary.

Response category / Cleanup status code, October 1984: V F S / O

ARKANSAS CITY DUMP
Arkansas City, Kansas

Conditions at listing (October 1981): The Arkansas City Dump, Cowley County, Kansas, was once the location of the Millikan Refining Co., which was destroyed by an explosion in the mid-1920s. Refinery wastes remained on about 5 acres. There was also a series of ponds holding aqueous wastes and covering about 5 acres, plus 0.5 acres of ponds that have been filled in. The site is near the Arkansas River. Trace amounts of toxic organic compounds (polynuclear aromatics) have been detected in ground water near the disposal areas. Most of the site is owned by a local development corporation and by Arkansas City. It has been divided into tracts and sold to small businesses.

In July 1981, EPA awarded a $44,700 Cooperative Agreement to Kansas under the Resource Conservation and Recovery Act. The funds are for a remedial investigation to determine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action.

This is the top priority site in Kansas.

Status (July 1983): In August 1981, EPA added $130,000 to the Cooperative Agreement. The remedial investigation was completed in the first quarter of 1983. The feasibility study is scheduled to be completed in mid-1984.

Response category / Cleanup status code, October 1984: R

CHEROKEE COUNTY
Cherokee County, Kansas

Conditions at listing (December 1982): The Cherokee County Site is a mining area covering about 410 square miles in Cherokee County, Kansas. It is part of a larger area sometimes referred to as the Tri-State Mining District, which encompasses Cherokee County, Jasper County in Missouri, and Ottawa County in Oklahoma. As a result of extensive lead and zinc mining and related activities covering almost 100 years, huge tailings piles cover an estimated 4,000 acres in southern Cherokee County alone. The tailings contain small amounts of lead, zinc, cadmium, and asbestos. Acidic water in abandoned mine shafts in the area contains high concentrations of toxic metals, particularly lead and cadmium. This mine water surfaces in Tar Creek in Okalahoma.

In 1981, following a report by the University of Kansas School of Medicine indicating an unusually high incidence of cancer, particularly lung cancer, in Cherokee and Jasper Counties, EPA performed a background study over the Tri-State area to identify potential carcinogens. An EPA aerial photographic study of Cherokee County in October 1982 indicates that the piles are susceptible to water erosion, with the run-off going to nearby streams.

This site was once listed under the name "Tar Creek, Cherokee County".

Status (July 1983): EPA has authorized preparation of a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. Under a Cooperative Agreement with EPA, Oklahoma is studying water quality problems in Ottawa County, Oklahoma. Also, Kansas, using State funds, has begun a study of air quality in southeastern Cherokee County.

In April 1983, the U.S. Centers for Disease Control issued a health advisory recommending permanent relocation of 11 families on or near the site. EPA then allocated $2.2 million to the Federal Emergency Management Agency for the relocation.

Response category / Cleanup status code, October 1984: R

DOEPKE DISPOSAL (HOLLIDAY)
Johnson County, Kansas

Conditions at listing (December 1982): Doepke Disposal (Holliday) operated a 10-acre site on the southern bluffs of the Kansas River Valley in Johnson County, Kansas, during the 1960s. The site, at the intersection of Holliday Drive and Interstate 435, received unknown quantities of industrial wastes such as paint sludges, spent solvents, metals tailings, and fiberglass resins. Leachate containing toxic organic and inorganic chemicals flows through a culvert under Holliday Drive into the Kansas River. County residents receive drinking water primarily from 21 wells less than 1 mile downstream from the site. Additional supplies are drawn from the Kansas River.

Status (July 1983): Recent analyses detected iron, manganese, boron, other metals, and bis-2-ethylhexylphthalate in leachate and shallow ground water. Contaminants in the leachate have not been detected at the river intake or in the well field. EPA is now evaluating these recent data. In addition, EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site.

Response category / Cleanup status code, October 1984: D

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

JOHNS' SLUDGE POND
Wichita, Kansas

Conditions at listing (December 1982): Johns' Sludge Pond is a surface impoundment in Wichita, Kansas. Between 1951 and 1970, Super Refined Oil, now out of business, recycled waste oil there, disposing of an estimated 7,000 cubic yards of sludge into an unlined pond. EPA found lead and organic compounds in ground water on and very near the site. A number of private wells are in the area. In the 1970s, in order to conduct remedial actions at the site, the city took ownership of two-thirds of the property. The Johns' estate owns the remainder.

Status (July 1983): EPA and the City of Wichita are negotiating for remedial action at the site.

Response category / Cleanup status code, October 1984: V F / I

A.L. TAYLOR ("VALLEY OF THE DRUMS")
Brooks, Kentucky

Conditions at listing (October 1981): The A.L. Taylor ("Valley of the Drums") Site covers 13 acres in Brooks, Kentucky, 12 miles south of Louisville. It was used a refuse dump, drum recycling center, and chemical dump from 1967 to 1977. The chemical wastes were largely from the paint and coatings industries of Louisville. Air, surface water, ground water, and soil are contaminated with organic and inorganic chemicals.

EPA conducted emergency response activities in March 1979 under Section 311 of the Clean Water Act, and in September 1981 under CERCLA, at a total cost of $650,000. Through these response activities and voluntary removal of wastes by known generators, a majority of the surface wastes (about 17,000 drums) were removed. A system was installed to control and treat contaminated run-off from the site.

This is the top priority site in Kentucky.

Status (July 1983): EPA has completed a feasibility study identifying alternatives for cleanup of subsurface contamination. The State and EPA Region 4 have agreed on the preferred alternative, and it was presented at a public meeting in June 1983. A $1.4 million Cooperative Agreement to provide Kentucky with the funds for cleanup is being negotiated.

Response category / Cleanup status code, October 1984: R F / O

AIRCO
Calvert County, Kentucky

Conditions at listing (December 1982): Airco operated a 5-acre industrial landfill in Calvert City, Kentucky, from the mid-1950s until 1971. Wastes in the fill include acids, crotonaldehyde, and several mercury compounds, which were disposed of mainly in bulk. In 1971, Air Products and Chemicals purchased Airco's manufacturing facility and received an easement from Airco to dispose of nonhazardous wastes in its landfill until 1980. When operations ceased, Air Products covered the landfill and installed a drainage system. A potential problem exists with contamination of ground water and surface water.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

B.F. GOODRICH
Calvert City, Kentucky

Conditions at listing (December 1982): The B.F. Goodrich Site is a 2-acre industrial landfill that operated in Calvert City, Kentucky, from 1969 to 1978. Among wastes accepted were brine sludges containing mercury and paladium, which were disposed of mainly in bulk. The site also contains several old pits where organic materials were burned. Later the pits were covered. Ground water contamination associated with waste disposal operations is suspected.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

DISTLER BRICKYARD
West Point, Kentucky

Conditions at listing (December 1982): The Distler Brickyard Site covers about 35 acres in West Point, Kentucky. It is an abandoned brick-manufacturing facility that was leased and used during the mid-1970s for disposal of industrial wastes. Among wastes accepted were those characteristic of the paint and coatings industries. In February 1982, EPA, using $300,000 in CERCLA emergency funds, removed all drums and contaminated soil from the site. However, spills are suspected of having contaminated ground water beneath the site.

Status (July 1983): EPA conducted geophysical surveys and installed monitoring wells to better define the extent of subsurface contamination. Also, EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R F / O

DISTLER FARM
Jefferson County, Kentucky

Conditions at listing (July 1982): The Distler Farm Site covers 8.7 acres in southwest Jefferson County, 17 miles from Louisville, Kentucky. In January 1979, EPA, using $300,000 made available under Section 311 of the Clean Water Act, responded to the emergency created when flood waters scattered drums of industrial waste stored at the site along the floodplain of Stump Gap Creek. EPA recovered and recontainerized 832 drums containing chemicals characteristic of the paint and coatings industry, then moved them to higher ground. Later, the State sent the drums to an approved disposal facility.

During the cleanup, EPA discovered trenches holding buried drums. A limited ground water study, conducted in October 1981, identified compounds similar to those found in the 1979 emergency. Sampling of nearby residential wells in 1979 and 1981 showed no contamination associated with waste disposal at the site.

Status (July 1983): EPA has conducted geophysical surveys and installed monitoring wells to better define the extent of subsurface contamination. Also, EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and to identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R F / O

LEE'S LANE LANDFILL
Louisville, Kentucky

Conditions at listing (July 1982): Lee's Lane Landfill covers 125 acres along the Ohio River floodplain in Louisville, Jefferson County, Kentucky. It first received waste in 1948 from domestic, commercial, and industrial sources. Prior to and while the wastes were received, the site was a sand and gravel quarry. In 1975, residents living adjacent to the site reported flash fires around their water heaters. After explosive levels of methane gas were detected, seven families were evacuated from their homes. In April 1975, the landfill was closed. County, State, and Federal agencies documented the presence of methane and other toxic gases in the ground east of the site. In 1978, extensive monitoring was conducted to define the gas migration problem. A venting system was finally installed in October 1980.

In February 1980, about 400 exposed drums of hazardous materials, some highly flammable, were discovered on the Ohio River bank adjacent to the landfill. Over 50 chemicals were identified, including phenolic resins, benzene, and relatively high concentrations of copper, cadmium, nickel, lead, and chromium. In October 1981, liquid wastes were pumped from the drums and taken to an approved disposal facility. The empty drums, as well as solid wastes, were removed from the river bank and buried on-site.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: F

NEWPORT DUMP
Newport, Kentucky

Conditions at listing (December 1982): Newport Dump covers 40 acres in Newport, Kentucky. From the late 1960s to 1978, the city owned and operated the site as a municipal landfill under a permit from the State. In 1979, the city sold the site to the Northern Kentucky Port Authority. Under the agreement, the new owner would be responsible for maintenance and proper closure. The authority entered into an Agreed Order with the State outlining steps necessary for proper closure. Leachate analyses conducted in late 1979 revealed low levels of PCBs and some heavy metals. The city installed a leachate collection system, but it was never operational. Contamination of ground water and surface water is suspected.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

BAYOU BONFOUCA
Slidell, Louisiana

Conditions at listing (December 1982): The Bayou Bonfouca (American Creosote) Site covers 55 acres near Slidell, Louisiana, in St. Tammany Parish. American Creosote Works, Inc., a manufacturer of wood preservatives, operated on the site for about 100 years. In 1970, after creosote spilled from tanks during a fire, the site was abandoned. The spill, in addition to plant operations, significantly contaminated sediments in Bayou Bonfouca and the surrounding area.

Status (July 1983): EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R

BAYOU SORREL
Bayou Sorrel, Louisiana

Conditions at listing (July 1982): The Bayou Sorrel Site covers 50 acres and is located 6 miles northwest of Bayou Sorrel, Louisiana, in Iberville Parish. The site is on the East Atchafalya Basin Floodway Protection Levee, adjacent to the Upper Grand River and Rat Bayou. The site, active in the mid-1960s, includes a number of burial cells, a landfarm, pits located near storage tanks, and a producing oil well. Liquid wastes and sludges, as well as containerized wastes, are present. The operator closed the site in 1979 under a court order obtained by the State with assistance from EPA. An evaluation of the previous closure indicates that it was not totally successful. Organic odors are prevalent on-site, and cover has eroded from some areas of the pits. During the closure attempt, some pits were covered with site overburden rather than a less permeable clay. Soil, ground water, and possibly air are contaminated with organic and inorganic pollutants.

Status (July 1983): The State and EPA are negotiating for a remedial investigation to determine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: F

CLEVE REBER
Sorrento, Louisiana

Conditions at listing (December 1982): The Cleve Reber Site covers 25 acres near Sorrento, Louisiana, in Ascension Parish about 25 miles southeast of Baton Rouge. Wastes were dumped at the site in the early 1970s until it was abandoned in 1972. From 500 to 600 barrels are visible on the surface. Some are corroding, and others appear to have exploded. They contain sulfur, asphalt, tars, plastics, and oily wastes. Also on the site are four ponds of water, piles of dry chemical waste, and an estimated 2,500 drums buried at shallow depths.

Status (July 1983): In July 1983, EPA approved $200,000 in CERCLA emergency funds to remove surface drums, contaminated soil, and dry chemical wastes.

The State and EPA are planning to undertake a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: V R / O

OLD INGER OIL REFINERY
Darrow, Louisiana

Conditions at listing (July 1982): The Old Inger Oil Refinery Site covers 14 acres near Darrow, Louisiana, in Ascension Parish. It was obtained by the company in 1976 to reclaim oil from refinery wastes. A spill in 1978 contaminated a large surface area. In 1981, Louisiana officially declared the site "abandoned." It has nine oil storage tanks, which have overflowed into nearby holding ponds and a swamp. The site is easily accessible to people, vehicles, and animals. Ground water and soil are contaminated by organic chemicals.

This is the top priority site in Louisiana.

Status (July 1983): In September 1982, EPA awarded a $210,000 Cooperative Agreement to Louisiana for a remedial investigation to determine the type and extent of contamination at the site. The work is scheduled to be completed in the fourth quarter of 1983. In April 1983, EPA added $180,000 to the Cooperative Agreement for conducting a feasibility study to identify alternatives for remedial action at the site. Also in April, $47,000 in CERCLA emergency funds were used to construct a diversion levee, repair a breach in the lagoon dike, conduct treatability studies on water and sludges, and fence the site.

EPA has identified parties potentially responsible for wastes at the site and is seeking their cooperation in the cleanup.

Response category / Cleanup status code, October 1984: R / O

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

PETRO-PROCESSORS OF LOUISIANA, INC.
Scotlandville, Louisiana

Conditions at listing (September 1983): The Petro-Processors of Louisiana, Inc., Site covers a total of about 55 acres near Scotlandville, East Baton Rouge Parish, Louisiana. It is comprised of two disposal areas on the banks of Bayou Baton Rouge in and/or near the floodplain of the Mississippi River. Although the two areas are about 1.5 miles apart, they both threaten the same surface waters and aquifer systems. Both areas were operated by the same management and equipment, and personnel were used interchangeably. The areas were operated concurrently from approximately 1969 until 1972. Generators in the area contracted with PetroProcessors for disposal of hazardous wastes, and the truck drivers took the wastes to the closest pit or the one with the most capacity at the time.

EPA filed suit against the owners and 10 waste generators in July 1980, alleging that toxic organic compounds and heavy metals had been released into local waterways, eventually finding their way to the Mississippi River, and were posing a threat to an underground drinking water supply.

The Scenic Highway disposal area is a pit in an area of permeable to semipermeable soils. Monitoring by EPA and the defendants detected a variety of organic chemicals in ground water outside the pit area. In addition, leachate is travelling through the banks of the bayou and rising to the surface of the closed pits. The U.S. Geological Survey has expressed concern that the area poses a serious threat to the "400 foot aquifer," a major aquifer in the area. The Scenic Highway disposal area was filled and closed around 1974. Liquid wastes were solidified, fill dirt added, a partial plastic cap installed, and a vegetative cover established. The primary problem is the potential for leachate migration and for exposure of toxic materials by erosion. About 3.5 million cubic feet of contaminated materials may be at the Scenic Highway area.

Brooklawn, the larger of the two areas, opened in the late 1960s. It did not completely cease operation until July 1980, when EPA filed suit. Brooklawn is believed to hold about 8 million cubic feet of contaminated materials. The area has three ponds—upper, lower, and cypress—and several disposal pits that have been covered. In June 1983, the cypress pond was inundated by the Mississippi River, and the floodwaters came within 4 inches of overtopping the lower pond. An old channel of the bayou runs through part of the area and may be a conduit for subsurface migration of wastes. Analysis of samples taken from downgradient wells reveals the presence of a separate phase containing up to 90 percent of various organic constituents.

Status (June 1984): On Feb. 16, 1984, a Federal judge approved a Consent Decree requiring the 10 generators to clean up the site. The cleanup must meet the substantive standards of the Resource Conservation and Recovery Act, and the defendants are responsible for perpetual maintenance. There is no monetary limit on the cleanup. The estimates for ultimate cost start at $50 million. In mid-May, the companies submitted a work plan for the remedial planning phase of the cleanup.

Response category / Cleanup status code, October 1984: V F

MCKIN CO.
Gray, Maine

Conditions at listing (December 1982): The McKin Co. Site occupies about 10 acres in Gray, Maine. It is a privately-owned abandoned sand and gravel site consisting of a fenced enclosure, an incinerator, a concrete-block building, an asphalt-lined lagoon, several large storage tanks, numerous 55-gallon drums, and other debris. The operation was constructed for waste generated when the Tamano, a Norwegian tanker, ran aground on a ledge in Hussey Sound, spilling 100,000 gallons of industrial fuel. In addition to the Tamano wastes, the owners also accepted septic tank wastes and industrial process wastes. As early as 1973, residents of East Gray reported odors in well water and discoloration of laundry. As the number of complaints increased, it became apparent that a contaminated plume was moving through the aquifer. In August 1977, an Emergency Health Ordinance was issued to prohibit any new construction within about 2 miles of the site. In November 1977, EPA conducted a hydrogeologic assessment of the area. About this time, the Farmers Home Administration provided an alternate water supply for contaminated private wells in the area. In December 1977, Gray issued a cleanup order to McKin Co. The State then removed the remaining wastes from all tanks, identified organic chemicals in the contents, and drilled over 75 shallow soil borings, which identified two areas of gross soil contamination.

Status (July 1983): EPA recently completed a remedial plan which recommends (1) additional studies to fully characterize the site to develop alternative remedial actions and (2) removal of wastes and tanks from the site. During April 1983, the State removed the barrels. The State has also brought legal action against McKin.

Response category / Cleanup status code, October 1984: R S / O

O'CONNOR CO
Augusta, Maine

Conditions at listing (December 1982): O'Connor Co., a dealer in scrap iron and metals, occupies about 5 acres in Augusta, Maine. One of the major operations at the site was the salvaging of used transformers containing PCBs. The State first inspected the site in 1973, when uncontained oil from the transformer operation overflowed a holding pond and drained into Riggs Brook. At this time, the owner agreed to install a 20,000-gallon tank to recover lost transformer oil. On a visit in 1976, the State found no 20,000-gallon tank, but two lagoons covering 2,000 square feet and equipped with an overflow pipe to prevent loss of floating oil. The first lagoon drained to the second, which drained to Riggs Brook. Oil from the first lagoon contains 10,000 to 20,000 parts per million PCBs. Sediments in Riggs Brook contain low levels of PCBs, indicating run-off from the site is entering surface water. The State recommended that dikes be installed to prevent run-off from entering either of the lagoons. In March 1977, the State recommended (1) pumping the oil in the lagoons to holding tanks and (2) excavating the lagoons to bedrock, covering them with 2 feet of marine clay, fertilizing, and seeding. In June and September 1978, the owner was reminded of the previous recommendations. In 1979, the State found the material in the lagoons had been pumped into several tanks, one of which was leaking. The lagoon had not yet been filled, but the State determined it could be used as a catch basin for oil leaking from a ruptured tank.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

PINETTE'S SALVAGE YARD
Washburn, Maine

Conditions at listing (December 1982): Pinette's Salvage Yard is located 1 mile southwest of the town of Washburn, Maine. In July 1979, the owner accepted three transformers filled with PCBs form Loring Air Force Base. During unloading, the transformers broke, spilling their contents onto an area measuring 40 feet by 40 feet. The oil migrated through the soil and may have contaminated ground water and surface water. The main concern is the potential for direct contact with highly contaminated soil.

Status (July 1983): In December 1982, the State placed a temporary cap over the spill area. EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R / O

SACO TANNERY WASTE PITS
Saco, Maine

Conditions at listing (December 1982): The Saco Tannery Waste Pits occupy about 225 acres in Saco, Maine. The property, presently owned by Maine Guarantee Corp., was abandoned by Saco Tanning Corp. when it filed for bankruptcy. On-site are about 30 lagoons and pits ranging in size from about 30 to 60 square feet, as well as two large chromium pits several acres in size.

In exess of 23 million gallons of chrome sludge, acids, alkaline sludge, and methylene chloride sludges were disposed of on the site. Some pits contain highly acid liquids and several chlorinated organic chemicals. The pits are unfenced. No samples of on-site ground water have been analyzed. However, ground water is shallow, making contamination possible. Private drinking water wells show no contamination as yet.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. The plan recommends initial remedial measures involving emptying the acid pits and restricting site access.

Response category / Cleanup status code, October 1984: R / O

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

WINTHROP LANDFILL
Winthrop, Maine

Conditions at listing (October 1981): The Winthrop Landfill is located in Winthrop, Maine, about 10 miles west of Augusta. The site includes the Winthrop Town Landfill (11 acres) and the adjacent privately-owned Savage Landfill (9.5 acres). Both landfills are located in an abandoned gravel pit near the shore of Lake Annabessacook. The town disposed of municipal and industrial wastes at its landfill for nearly 50 years and did not restrict the types of wastes accepted until the mid-1970s. Late in 1979, an attempt to expand the landfill revealed numerous rusting and leaking barrels. The town decided to close the landfill and construct a transfer station on the site. The Savage Landfill contracted to accept municipal solid waste and debris from two small neighboring towns and also accepted wastes from Winthrop to extend the life of the town landfill.

In September 1981, EPA made available $450,000 under the Resource Conservation and Recovery Act for (1) a remedial investigation to determine the type and extent of contamination at the site and the probable routes of migration to both private water supplies and Lake Annabessacook and (2) a feasibility study to identify alternatives for remedial action at the site.

Status (July 1983): The remedial investigation was completed in June 1983. Volatile organics attributable to the landfill were found to be migrating off-site in ground water. Monitoring wells revealed contamination with tetrahydrofuran (THF), toluene, methyl ethyl ketone, ethylbenzene, chloroethane,and other volatile organics. One residential well was found to be contaminated with THF. The feasibility study is scheduled to he completed in the fourth quarter of 1983.

EPA has identified parties potentially responsible for wastes associated with the site and is seeking their cooperation in the cleanup.

Response category / Cleanup status code, October 1984: V F / I

LIMESTONE ROAD
Cumberland, Maryland

Conditions at listing (December 1982): The Limestone Road Site consists of two contiguous areas covering 35 acres in Cumberland, Allegany County, Maryland. In 1981, the State identified chromium-bearing waste from a local industry on the site, which is privately owned. In March 1982, EPA detected contamination of ground water and surface water at the site.

Status (July 1983): The State has been pursuing enforcement action against the owners of both of the properties that comprise the site. EPA is planning to prepare a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

MIDDLETOWN ROAD DUMP
Annapolis, Maryland

Conditions at listing (December 1982): The Middletown Road Dump covers 10 acres in a mixed residential/rural area near Annapolis, Anne Arundel County, Maryland. The site, which is privately owned, has been used for the disposal of rubble, fill material, and miscellaneous wastes. The State detected toluene, benzene, paint waste, and solvents in at least 12 drums and one dumpster at the site. While taking remedial action, the owner crushed some drums, spilling liquids onto the site. Although ground water at the site has not been sampled, potential contamination is of concern because ground water is used for drinking water in the area. The site is located within 1,200 feet of an unnamed tributary to Whitehall Creek, which empties into Chesapeake Bay.

Status (July 1983): The State is pursuing enforcement action against the site owner and the contractor who was assisting in the remedial action. EPA has recently completed emergency action at the site, which included removal of contaminated soil, capping of the site, and installation of monitoring wells.

Response category / Cleanup status code, October 1984: R / I

SAND, GRAVEL, & STONE
Elkton, Maryland

Conditions at listing (December 1982): The Sand, Gravel, & Stone Site is an inactive quarry near Elkton, Cecil County, Maryland. From 1969 to 1974, approximately 3 acres of the site, which is privately owned, were used for the disposal of bulk wastes (processing waste water, sludge still bottoms) and about 90 drums of solid and semisolid waste. Pits were excavated and used for disposal of approximately 700,000 gallons of waste. In 1975 and 1976, in response to orders from the State, the owner removed 200,000 gallons of liquid waste from the site and buried drums and sludges on the site in clay-lined pits. In May 1982, EPA noted contamination of surface water as well as localized contamination of ground water at the site. Water samples collected from homes within 0.3 miles of the site were not contaminated.

Status (July 1983): The State has taken enforcement action against a party potentially responsible for wastes at the site. EPA recently completed a draft remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide future actions at the site.

Response category / Cleanup status code, October 1984: R / I

BAIRD & McGUIRE
Holbrook, Massachusetts

Conditions at listing (December 1982): The Baird & McGuire Site covers about 15 acres in Holbrook, Norfolk County, Massachusetts. Since 1912, the company has run a batching operation involving the mixing and packaging of pesticides, emulsifiers, floor waxes, strippers, disinfectants, coal-tar emulsions, and associated products. The site is 500 feet west of the Cochato River, which is diverted 2.5 miles downstream into the Richardi Reservoir, part of the water system serving nearly 90,000 people in Braintree, Holbrook, and Randolph. The site is also located within 1,000 feet of Holbrook's South Street Well Field, which was abandoned due to contamination. Analyses of on-site ground water show high levels of arsenic and numerous organic compounds. Creosote is found in ground water between the site and in the Cochato River. Similar organic contamination has been documented since 1958 in the South Street Well Field. Up to 10 parts per million of organic compounds were detected in the air on-site.

Status (July 1983): In March 1983, a prolonged period of heavy rain raised the levels of ground water and the Cochato River, creating an oil slick on the river. EPA's Emergency Response Team came in and brought the situation under control. EPA ordered Baird & McGuire to undertake 14 tasks to immediately stabilize the site. The company performed some of the tasks, but informed EPA that it was financially unable to implement all of them. In April 1983, EPA approved $192,000 in emergency funds to (1) erect a fence, (2) install a system to divert run-off, (3) collect hydrogeological data on-site, and (4) evaluate and modify an existing system to control ground water. This work is currently underway.

EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It was circulated for public review on May 17, 1983. The next step, expected to begin in the fall of 1983, is a remedial investigation/feasibility study to determine the type and extent of contamination at the site and to identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R F / O

CANNON ENGINEERING CORP. (CEC)
Bridgewater, Massachusetts

Conditions at listing (December 1982): The Cannon Engineering Corp. (CEC) Site occupies 3 acres in Bridgewater, Massachusetts. From 1974 to 1980, CEC was licensed to transport, store, and incinerate certain types of hazardous wastes. On-site structures include 21 storage tanks, three buildings, an office/warehouse, and an incinerator. Ground water south of the site is contaminated with benzene, 1,1,1-trichloroethane, and toluene. To date, contamination of drinking water wells has not been detected. A pond to the south and a swamp to the west are also contaminated. Owners of CEC were indicted for illegal storage and disposal of hazardous wastes. The company is in receivership, but the receiver is not able to finance the continued operation of the facility. In October 1982, the State contracted for removal and disposal of hazardous wastes in tanks (about 150,000 gallons) and in about 600 drums. The cleanup was completed in December 1982.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. EPA is planning a remedial investigation to determine the type and extent of contamination of soils, ground water, and surface water, both on- and off-site.

Response category / Cleanup status code, October 1984: R S

CHARLES GEORGE RECLAMATION TRUST LANDFILL
Tyngsborough, Massachusetts

Conditions at listing (October 1981): The Charles George Reclamation Trust Landfill (the Trust) occupies about 70 acres in Tyngsborough, Worcester County, Massachusetts. From 1973 to 1975, the privately-owned landfill disposed of municipal and industrial waste under permit from the State. Concentrated leachate has seeped from the landfill through the unconsolidated aquifer and into surface water in a number of locations. The leachate contains from 70 to 10,000 parts per billion of various chemicals, including vinyl chloride, benzene, tetrachloroethylene, methyl ethyl ketone, and arsenic. Contaminated surface water crosses residential and recreational areas at several points. Bedrock wells serving the Cannongate Condominium contain the same chemicals as the leachate. In July 1982, the State shut down the wells.

Status (July 1983): In May 1983, four private bedrock wells serving homes adjacent to the condominiums were found to have low levels of the same pollutants as the condominium wells. All the other homes in the vicinity of the condominiums may also be threatened.

EPA recently prepared a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. The plan recommended as an initial remedial measure to provide a permanent water supply for people affected.

In the spring of 1983, the Trust sold assets of a trucking company it owned and applied for reorganization under Chapter 11 of the Bankruptcy Act. In May 1983, EPA issued a Notice Letter to the Trust requesting its cooperation in the cleanup.

Response category / Cleanup status code, October 1984: R F / O

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

GROVELAND WELLS
Groveland, Massachusetts

Conditions at listing (December 1982): Groveland Production Wells #1 and #2 once were the sole source of drinking water for Groveland, Essex County, Massachusetts. This site covers 850 acres and includes the two municipal wells, the surface water and ground water that supply them, and the suspected source(s) of contamination. In 1979, both wells were shut down when the State detected trichloroethylene contamination. At this time, the town instituted emergency conservation measures and obtained water through temporary hookups to neighboring communities. The backups were discontinued when the town developed Well #3 along the Merrimack River, using an emergency grant from the U.S. Department of Housing and Uuban Development. However, due to the lower yield of Well #3, the town continues its conservation measures.

Status (July 1983): The town's consulting firm has identified two likely sources of contamination of the aquifer and municipal wells. Trichloroethylene, 1,1,1-trichloroethane, 1,2-dichloroethylene, toluene,and chloroform have been found in ground water and surface water throughout the study area. The town has filed lawsuits against three companies involved with the two sites. One company has reached a settlement with the town to investigate its property.

Response category / Cleanup status code, October 1984: V R S

HOCOMONCO POND
Westborough, Massachusetts

Conditions at listing (December 1982): Hocomonco was a recreational pond in Westborough, Massachusetts, until the State closed it in 1980. It is privately owned. From 1920 to 1963, the site was the location of wood-treating and asphalt-batching operations. Past disposal practices resulted in creosote and phenol contamination of ground water, surface water, and sediments and soils in the pond and on its shore. A municipal well, the Otis Street Well, is located 1,500 feet to the northwest of the pond. To date, no contaminants have been detected in this well, which is sampled every 6 months.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site.

The owners of the property contracted for a study of the historical use of the land and the processing operations and disposal practices associated with each use. The contractor also recommended an approach to investigation of the area.

Response category / Cleanup status code, October 1984: R

INDUSTRI-PLEX
Woburn, Massachusetts

Conditions at listing (October 1981): The Industri-Plex Site covers 250 acres in north Woburn, Massachusetts. Between about 1953 and 1981, Merrimac Chemical Co. and its successor, Monsanto Co., manufactured insecticides, explosives, acids, and other chemicals at the site. In the late 1960s, much of the site was acquired by the Mark Phillip Trust for industrial development. Excavation in the 1970s uncovered and mixed 130 years' accumulation of industrial by-products and wastes. Many of the pits, piles, and lagoons are continuously leaching toxic metals into the environment. As excavation progressed, pockets of buried animal hides from glue manufacturing were exposed to the air, causing odors. In June 1979, the Army Corps of Engineers and the State issued a cease and desist order to the Trustee relative to the placing of dredged or fill material into the wetlands on the site. Both the Corps and the State entered into Consent Decrees requiring the defendant to deal with the hazardous waste problems at the site. The defendant did not.

This site was once listed under the name "Mark Phillip Trust."

Status (July 1983): Shortly after the site was listed, Stauffer Chemical Corp. came forward to discuss its role in cleanup of this site. Extensive discussions resulted in a Consent Order, which outlines a two-phase investigation leading to a long-term solution. Stauffer has completed the field portion of Phase I. Phase II, a feasibility study, is scheduled to begin in mid-1983.

Since May 1981, EPA has spent $334,000 on investigation of the site and installation of a 10,000-foot fence.

EPA has identified other parties potentially responsible for wastes associated with the site and is seeking their cooperation in the cleanup.

Response category / Cleanup status code, October 1984: V R / I

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

IRON HORSE PARK
Billerica, Massachusetts

Conditions at listing (September 1983): Iron Horse Park is a 1,300-acre industrial park in Billerica, Massachusetts, about 30 miles northwest of Boston. EPA is investigating five industries within the park and two adjacent to it. The industries have historically disposed of their by-products, which include asbestos, PCBs, and miscellaneous organic chemicals, in lagoons or landfills on their properties. The park is located within the drainage basins of two rivers. A canal, stream, and wetlands are capable of carrying contaminants into both river basins. Air pollution is also of concern because about 8,300 people live within 1 mile of the site.

Status (June 1984): EPA is developing a scope of work for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Preliminary sampling by EPA indicates that ground water and surrounding surface water contain a number of pollutants, including asbestos, volatile organic chemicals, acids, and pesticides.

Response category / Cleanup status code, October 1984: R

NEW BEDFORD SITE
New Bedford, Massachusetts

Conditions at listing (July 1982): PCBs were used by two manufacturers of electrical capacitors located in New Bedford, Massachusetts, over several decades until the late 1970s. As a result of poor disposal practices, PCB contamination in the New Bedford area is widespread. The harbor is contaminated at least 6 miles from the upper Acushnet River to Buzzards Bay. Ambient air, surface water, ground water, soils, sediments, and the food chain are contaminated, as well as industrial plant sites. Sullivan's Ledge and the New Bedford Municipal Landfill, which contains an estimated 500,000 pounds of PCB waste, are also contaminated.

In May 1982, EPA entered into Consent Agreements with two companies to address the PCB problem on their properties.

This is the top priority site in Massachusetts.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. The next step, a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action, is scheduled to begin in the summer of 1983.

Response category / Cleanup status code, October 1984: V R F S / I

NYANZA CHEMICAL WASTE DUMP
Ashland, Massachusetts

Conditions at listing (October 1981): The Nyanza Chemical Waste Dump is adjacent to an active industrial complex in Ashland, Massachusetts. The 35-acre site is within 1,000 feet of Sudbury Reservoir, which is used for recreational purposes and is considered a possible supplemental source of drinking water for the metropolitan Boston area. From 1917 to 1978, the site was occupied by numerous producers of textile dyes and intermediates. Nyanza Chemical, the last of these companies, operated from 1965 to 1978, when it went out of business due to financial problems. Over 45,000 tons of chemical sludges were generated by Nyanza's waste water treatment processes. Soil, ground water, and surface water are contaminated with heavy metals and chlorinated organics. Mercury-laden particulates may also have been blown into the air from exposed sludges.

The current owner leases the old plant to various businesses. When Nyanza sold the land, the court required that about $250,000 be placed in escrow, most of which the owner has spent on site studies.

Status (July 1983): In January 1983, EPA signed a $500,000 Superfund State Contract with Massachusetts for a remedial investigation to determine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the first quarter of 1984.

EPA has identified parties potentially responsible for wastes associated with the site and is seeking their cooperation in the cleanup.

Response category / Cleanup status code, October 1984: R

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/"Superfund")

PLYMOUTH HARBOR/CANNON ENGINEERING CORP.
Plymouth, Massachusetts

Conditions at listing (December 1982): The Plymouth Harbor/Cannon Engineering Corp. Site occupies 0.5 acres in an industrial park in Plymouth, Massachusetts. About 20 yards from the shores of Plymouth Harbor are two above-ground 250,000-gallon tanks and one 500,000-gallon tank containing mixed solvents and oily wastes. Several seams have leaked, contaminating soils around the tanks. Ground water contamination could not be documented because there are no wells and numerous potential sources of contamination. Officials of the industrial part have complained about odors. Major concerns center around possible rupture of the tanks, which would contaminate both ground water and surface water. In addition, the site poses a fire and explosion hazard.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. Actions proposed to safeguard the harbor and the community include removal and proper disposal of the hazardous substances from the tanks. Planning is underway on the next step, a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: V R S / O

PRC RESOURCES
Palmer, Massachusetts

Conditions at listing (December 1982): The PRC Resources Site, formerly owned by Philips Resources, Inc., is located in Palmer, Massachusetts. The property, which abuts a residential area, once covered 3.6 acres and included two buildings with a 1.5-million-gallon storage capacity. Now, the site covers 2 acres and holds 34,000 gallons of waste. The inactive facility reclaimed waste oil from Massachusetts collection points. These products were then heat treated and sold as a base for lubricating oil, road spray oil, and fuel. After a spill in June 1982, EPA discovered several leaking tanks and containment dikes, as well as saturated soils. Surface waters, wetlands, and ground water are directly threatened by the waste. Trichloroethane and PCBs have been identified in an adjacent swamp.

In 1982, acting under Section 311 of the Clean Water Act, EPA required the owner to contain the oil discharge, determine the contents of 22 tanks, and investigate the possibility of ground water contamination. In response, the owner sampled tanks, installed a boom in the swamp, and began further maintenance activities, including the installation of a chain link fence.

Status (July 1983): The State and EPA are monitoring the containment process and are awaiting results of more extensive sampling and a proposal from the owner detailing how to proceed with the cleanup.

EPA recently completed a remedial plan outling the investigations needed to determine the full extent of cleanup required at the stie.

Response category / Cleanup status code, October 1984: S / I

RE-SOLVE, INC.
Dartmouth, Massachusetts

Conditions at listing (October 1981): Re-Solve, Inc., reclaimed solvents for 24 years on a 6-acre site in Dartmouth, Massachusetts, before closing voluntarily in October 1980. The site is in a rural area of few residences, deep woods, and an adjacent wetland. Preliminary data indicate that the ground water is shallow, with flow towards the Copicut River 500 feet east. On site are unlined waste lagoons containing high concentrations of solvents, PCBs, and toxic metals. The lagoons, which are within 12 to 18 inches of overflowing, are in poor condition. The bottoms of the lagoons are situated in the water table, and some contaminants have migrated to ground water. Surface waters are threatened by ground water discharge, run-off, and potential lagoon overflows.

In 1980, when Re-Solve closed the facility, it surrendered its State license and sold the property to the current owner. The State required the company to remove all hazardous waste from the site and to take certain other actions. The company refused, and the State started an enforcement action.

Status (July 1983): In August 1982, EPA started a remedial investigation to determine the extent and type of contamination at the site and a feasibility study, which recommended alternatives for remedial action. The final cleanup option for source removal and encapsulation is estimated to cost $3 million. Design for this work is scheduled to start in the summer of 1983.

EPA began negotiations for remedial action with responsible parties on June 14, 1983. Negotiations for surface cleanup by responsible parties will be concluded later in the year.

Response category / Cleanup status code, October 1984: R F / I

SILRESIM CHEMICAL CORP.
Lowell, Massachusetts

Conditions at listing (July 1982): The Silresim Chemical Corp. Site covers 5 acres in an industrial area 1 mile south of the central business district of Lowell, Massachusetts, and 0.3 miles from several residential areas. Starting in 1971, Silresim began reclaiming (under a State permit) a variety of chemical wastes, waste oil, solvents, and sludges containing heavy metals. In 1977, Silresim declared bankruptcy and abandoned the site, leaving behind 30,000 decaying drums and several large storage tanks. When the owner abandoned the site, the State undertook a $2.2 million cleanup of the drums and tanks.

Ground water flows generally to the northwest towards Meadow Brook, which drains into the Merrimack River, the source of water for Lawrence. Surface water containing volatile organic compounds, pesticides,and PCBs drains from the site onto two or possibly three adjacent properties. Soil is similarly contaminated. A noticeable odor is present and is aggravated by hot or humid weather.

Status (July 1983): In April 1983, EPA completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. EPA is upgrading the fence which surrounds the site and undertaking a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. During the summer and fall of 1983, EPA is scheduled to demolish the buildings on-site and temporarily encapsulate the site to prevent contaminants from migrating off-site. Negotiations with parties potentially responsible for wastes associated with the site will also be undertaken during the summer.

Response category / Cleanup status code, October 1984: R S / O

SULLIVAN'S LEDGE
New Bedford, Massachusetts

Conditions at listing (September 1983): Sullivan's Ledge is an abandoned granite quarry about 10 acres in size located in New Bedford, Massachusetts. The site, owned and operated by the city, was used for decades as an industrial dump.

In 1982, EPA detected high levels of PCBs in ambient air and soil. Additional EPA investigations in the spring of 1983 found significant levels of PCBs, vinyl chloride, and chlorinated industrial solvents in soil and ground water. Run-off from the site drains into nearby Appanogansett Swamp.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: R

W.R. GRACE & CO., INC. (ACTON PLANT)
Acton, Massachusetts

Conditions at listing (December 1982): The W.R. Grace & Co., Inc., plant covers 500 acres in Acton, Massachusetts. Until early 1982, the plant manufactured various specialty chemicals and other products for industrial use. Since at least 1973, residents in South Acton have filed complaints about periodic odors and irritants in the air around the Grace plant. In addition, the town drilled Assabet Wells #1 and 2 in the area, which contains deep deposits of sand and gravel and bears large amounts of ground water. However, the water had odors indicating significant contamination. In 1978, when Grace proposed expanding part of the plant, local and State officials undertook a more detailed examination of the company's waste disposal practices. This led to the precautionary closing of two contaminated municipal wells, reducing Acton's drinking water supply by 40 percent. On Oct. 21, 1980, EPA and Grace signed a Consent Decree, representing an out-of-court settlement of a Federal suit filed against the company under the Resource Conservation and Recovery Act. The settlement required Grace to clean up and restore the quality of the aquifer supplying Assabet Wells #1 and #2 and to close out the existing lagoons and landfill on-site, which are no longer in use.

Status (July 1983): EPA is evaluating Grace's proposal to start cleanup of the lagoons and landfill and drill wells to intercept contaminated water in the aquifer.

Response category / Cleanup status code, October 1984: V F / I

WELLS G & H
Woburn, Massachusetts

Conditions at listing (December 1982): The Wells G & H Site covers about 500 acres in East Central Woburn, Massachusetts. Between 1964 and 1979, the wells provided approximately 25 percent of the drinking water for the town, primarily 25 homes and businesses in the southeastern portion. In 1979, the State closed the wells after detecting four chlorinated solvents in the water. The concentration of total volatile organics was approximately 500 parts per billion. In 1980, EPA began preliminary assessments of several industries in the area that may have affected Wells G & H. The investigation, later expanded to include an evaluation of the geology and ground water quality of North and East Woburn, was completed in June 1982.

Status (July 1983): EPA has issued three orders against potentially responsible parties under Section 3013 of the Resource Conservation and Recovery Act (RCRA). The orders require the companies to conduct a hydrogeological investigation of their properties. EPA has also sent 15 letters (under Section 3007 of RCRA) to other companies within the study area requesting detailed information about their use of hazardous materials.

EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: V F

ANDERSON DEVELOPMENT CO.
Adrian, Michigan

Conditions at listing (December 1982): The Anderson Development CO. (ADC) Site covers 10 acres in Adrian, Michigan. From 1971 to March 1979, ADC manufactured a chemical curing agent under the name Curene 442. The chemical, 4,4-methylene bis(2-chloroaniline) (MBOCA), is a carcinogen. In 1973, anilines were found in the East Side Drain, where ADC discharged wastes waters to the South Branch of the Raisin River. Later that year, ADC began discharging to the Adrian municipal waste water treatment plant, decreasing the plant's efficiency. MBOCA was detected in sewage sludge and in sediments from a treatment lagoon. Studies conducted throughout 1979 also found MBOCA widely distributed in soils within 2 miles of the plant, and in the urine of ADC workers and preschool children living near ADC.

The State paved streets adjacent to the ADC industrial zone, cleaned 253 house holds, and removed or tilled and covered contaminated soils in the industrial and residential areas.

Status (July 1983): Conditions at this site are currently being addressed through a State enforcement action against parties responsible for wastes at the site.

Response category / Cleanup status code, October 1984: D

AUTO ION CHEMICALS, INC.
Kalamazoo, Michigan

Conditions at listing (December 1982): The Auto Ion Chemicals, Inc., Site covers 1 acre in Kalamazoo, Michigan. Between 1963 and 1973, the company treated chromium plating wastes on the site. About 122,000 gallons of liquid plating wastes and sludges remain on-site in three basement areas and an outside concrete-lined lagoon. While the plant operated, the State documented numerous discharges of pollutants to the ground, sewers, and Kalamazoo Rivaer. Hexavalent chromium and cyanide were detected in spills on the ground and in the river. Two city wells located within 1.3 miles of the site may be threatened. The wells are part of the Kalamazoo municipal system, which provides water to over 100,000 residents.

In 1981, Kalamazoo tried to condemn the facility. The owner filed for an injunction, but the case was dropped when the property reverted to the State because the owner failed to pay taxes. Vandals have repeatedly destroyed sections of the fence around the site.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: V

BERLIN & FARRO
Swartz Creek, Michigan

Conditions at listing (July 1982): Berlin & Farro operated an incinerator for liquid industrial wastes in Swartz Creek, Michigan, from 1971 until 1980, when the company filed for bankruptcy. The 40-acre site was then placed in receivership. A landfill on the property was used for disposal of crushed and empty drums. In 1974, the company was ordered to close down because the incinerator, which had no emission controls, and an open lagoon on-site posed a health threat. After that, the State pursued administrative and legal actions to force cleanup, with little success. The site holds an estimated 10,000 buried drums, five buried tanks containing about 30,000 gallons of C-56 liquids (a pesticide by-product), and four lagoons containing approximately 11,000 cubic yards of contaminated sludges. Slocum Drain and Swartz Creek are contaminated with C-56. Emissions of C-56 into the air present a public health threat.

In May 1980, the Michigan Governor declared a toxic substance emergency at the site, and the State has since used $850,000 to remove and dispose of 15,300 cubic yards of sludges. In June 1980, EPA spent $96,000 in an emergency action to fence the site and excavate and dispose of contaminated soil and drums west of the lagoon area.

Status (July 1983): In July 1982, EPA awarded a $1,033,844 Cooperative Agreement to Michigan to (1) install a temporary cap over the lagoon area, (2) remove the underground storage tanks (both completed in the fourth quarter of 1982), (3) conduct a remedial investigation of hydrogeological conditions and the wastes present (scheduled to be completed in the fourth quarter of 1983), and (4) a feasibility study to identify alternatives for remedial action at the site (scheduled to be completed in the third quarter of 1984).

In the first quarter of 1983, the State removed an additional 15,000 cubic yards of sludge. A limited feasibility study is being conducted to identify alternatives for the landfill and other buried tanks, drums, and drain tiles. It is scheduled to be completed in the third quarter of 1983.

Response category / Cleanup status code, October 1984: V R F S / 0

BURROWS SANITATION
Hartford, Michigan

Conditions at listing (September 1983): The Burrows Sanitation Site covers 4 acres in a mostly rural area about 1 mile from Hartford, Michigan. The privately-owned company accepted industrial sludges from 1970 to 1977. Six lagoons containing metal hydroxide sludge remain on-site. Sampling of the lagoons by the State indicates high levels of lead, chromium, zinc, and nickel. Monitoring wells on-site are contaminated with heavy metals, but private wells nearby show no contamination as yet. The berms around the lagoons have been breached in places, and the lagoons overflow during heavy rains. The State estimates that 2,000 to 4,000 gallons of sludge have been lost to surrounding areas. Flow from the site is toward the Paw Paw River.

Status (June 1984): On June 8, 1984, EPA issued an Administrative Order requiring the parties responsible for wastes associated with the site to start an immediate cleanup of the site.

Response category / Cleanup status code, October 1984: D

BUTTERWORTH #2 LANDFILL
Grand Rapids, Michigan

Conditions at listing (December 1982): The Butterworth #2 Landfill covers 60 acres adjacent to the Grand River in Grand Rapids, Michigan. It was owned and operated by the city until the State closed it in 1971 for improper operations. It accepted industrial wastes, including plating wastes, cyanides, and organic solvents. The site is improperly covered, and leachate is occasionally a problem. The Grand River is threatened by leachate and run-off from the site.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: F

CEMETERY DUMP
Rose Center, Michigan

Conditions at listing (December 1982): Cemetary Dump is in rural Oakland County, near Rose Center, Michigan. From 300 to 600 barrels of industrial wastes were dumped in an old gravel pit near a cemetery in the late 1960s. Excavation of a trench uncovered 20 to 30 barrels that contained paint sludges, solvents, PCBs, and oils. Sampling of three residential wells next to the site detected no contamination.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

CHARLEVOIX MUNICIPAL WELL
Charlevoix, Michigan

Conditions at listing (December 1982): The 5,000 residents of the City of Charlevoix, Michigan, are served by one municipal well. In September 1981, the State detected 37 parts per billion of trichloroethylene (TCE) in the well. In November 1981, the city installed four monitoring wells around the municipal well, which also detected TCE. A study by EPA in mid-1982 identified three possible sources of contamination, but could not define the actual source.

Status (July 1983): EPA recently prepared a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R / I

CHEM CENTRAL
Wyoming Township, Michigan

Conditions at listing (December 1982): The Chem Central Site covers 5 acres in Wyoming Township, Kent County, Michigan. In 1977, the State detected high concentrations of PCBs heavy metals, phthalates, oils, and organic compounds in oily sediments in a ditch near the site. Despite repeated draining, contaminants continue to leach into the ditch, which discharges to Cle Drain, a tributary of Plaster Creek. Ground water studies conducted by the State have traced the contamination to Chem Central (formerly Wolverine Solvents), a chemical distribution facility. The ditch area has been fenced and warning signs posted.

In 1980, the State filed suit seeking a permanent injunction to halt Chem Central's discharges to the ground and dry wells and to stop contaminating ground water.

Status (July 1983): Conditions at this site are currently being addressed through a State enforcement action.

Response category / Cleanup status code, October 1984: 5

CLARE WATER SUPPLY
Clare, Michigan

Conditions at listing (December 1982): Two of three municipal wells in the City of Clare, Clare county, Michgan, are contaminated with chlorinated solvents, including dichloroethylene (DCE) and trichloroethylene (TCE). The State discovered the contamination as part of its sampling of public water supplies. TCE levels were has high as 57 parts per billion. The city has increased production of its uncontaminated well and is using an aeration system to volatilise the contaminants in the other two wells. The State has identified eight potential sources of ground water contamination. EPA installed monitoring wells in the Clare area in August 1982.

Status (July 1983): EPA's monitoring wells indicate four sources are potentially responsible for the well contamination.

Response category / Cleanup status code, October 1984: D

CLIFF/DOW DUMP
Marquette, Michigan

Conditions at listing (December 1982): The Cliff/Dow Dump is located in Marquette, Marquette County, Michigan. About 20,000 cubic yards of wood tars, a by-product of the manufacture of charcoal briquets, were disposed of at the site from 1954 until the late 1960s. Ground water contains benzene, phenol, xylene, chloroform, and other toxic constituents.

Status (July 1983): Conditions at this site are currently being addressed through an enforcement action against parties responsible for wastes at the site.

Response category / Cleanup status code, October 1984: F

DUELL & GARDNER LANDFILL
Dalton Township, Michigan

Conditions at listing (December 1982): The Duell & Gardner Landfill covers 30 acres in Dalton Township, Muskegon County, Michigan. The site, which was privately owned, was in operation from about 1969 to 1975. The site is poorly covered and there is evidence of open dumping of leaking unsealed containers. General refuse and garbage are scattered about the site. PCBs, ethylenimine, and other chemicals were detected in soil. Contamination of ground water is suspected.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

ELECTROVOICE
Buchanan, Michigan

Conditions at listing (December 1982): Electrovoice operates an electroplating plant on a 5-acre site in Buchanan, Michigan. Until the late 1960s, the plant discharged waters into two seepage lagoons on-site. Then the company stopped using the lagoons and removed much of the material already in them. In 1979, an industrial sewer link broke, discharging an unknown amount of plating wastes into the abandoned lagoons. The company immediately treated and removed the discharge, repaired the line, and installed a holding tank to prevent similar incidents in the future.

In January 1980, the State detected toluene and xylene in two of the four monitoring wells around the lagoons and trichloroethylene in one of the lagoons.

Status (June 1984): EPA deferred rulemaking on this site in September 1983 to allow more time to resolve technical issues related to its inclusion on the NPL. After further review and investigative work, EPA placed the site on the NPL.

Response category / Cleanup status code, October 1984: D

FOREST WASTE PRODUCTS
Otisville, Michigan

Conditions at listing (December 1982): The Forest Waste Products Site is in Otisville, Genesee County, Michigan. From 1972 to 1978, the company was licensed by the State to operate an industrial landfill and receive liquid industrial wastes. The site did not screen incoming wastes properly and accepted toxic materials such as polybrominated biphenyls and C-66. Oils, PCBs, and plating wastes were buried in drums or dumped into surface impoundments. PCBs, copper, and zinc have been detected in ground water.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R F / I

G & H LANDFILL
Utica, Michigan

Conditions at listing (July 1982): The G&H Landfill covers 40 acres in Utica, Macomb County, Michigan. From the late 1950s to 1966, millions of gallons of industrial wastes, including oils, solvents, and process sludges, were dumped into pits and lagoons at the site. In response to a law suit filed by the State, a Consent Order was entered in 1967. It required the company to stop disposal of all liquid wastes, but not to clean up wastes already at the site. The site was operated as a refuse landfill from 1967 until it closed in 1974. EPA and the State have documented contamination of soil, surface water, and ground water in the vicinity of the site.

Status (July 1983): In July 1982, EPA spent $6,902 in CERCLA emergency funds to fence an area contaminated with high levels of PCBs.

EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

GRAND TRAVERSE OVERALL SUPPLY CO.
Greilickville, Michigan

Conditions at listing (December 1982): The Grand Traverse Overall Supply Co.Site covers 1 acre in Greilickville, Leelanau County, Michigan. Perchloroethylene (PCE) and trichloroethylene (TCE) were identified in nearby shallow private wells serving residences and a school. PCE was also found in soils and water of an on-site seepage lagoon, and in soil samples from inside and outside a dry well on the site. In 1977, cooling waters were discharged to sanitary sewers. The wet well was excavated and new wells constructed for the school and residences with contaminated wells.

Status (July 1983): Conditions at this site are currently being addressed through an enforcement action against parties responsible for wastes at the site.

Response category / Cleanup status code, October 1984: D

GRATIOT COUNTY LANDFILL
St. Louis, Michigan

Conditions at listing (October 1981): The Gratiot County Landfill covers 40 acres about 0.5 miles southeast of St. Louis, Michigan. Prior to 1977, the Michigan Chemical Corp. (later purchased by Velsicol Chemical Corp.) disposed of various plant wastes, including polybrominated biphenyls (PBBs), at the landfill. In 1977, the State discovered that PBBs had been disposed of in the Gratiot County Landfill and found elevated levels of contaminants in shallow aquifers and in several nearby ponds. In addition, the State learned that in at least one or possibly two places the wastes were in direct contact with the immediately underlying aquifer and that the potential existed for contamination of deeper aquifers supplying drinking water for the region.

In August 1981, EPA awarded a Cooperative Agreement to Michigan using $386,000 made available under the Resource Conservation and Recovery Act. The agreement called for developing plans and specifications for:

- Containment to minimize migration of contaminants from the landfill. This includes regrading the surface to maximize run-off, capping it to prevent infiltration, which would increase hydraulic pressure within the fill, and constructing a slurry wall along the property boundary to contain contaminated ground water.
- Construction of a dewatering and purge system to minimize migration and to prevent increases in hydraulic pressure, which could damage the slurry wall.
- Installation of an on-site treatment facility to decontaminate water used to purge the landfill.

This is the top priority site in Michigan.

Status (July 1983): In November 1982, Velsicol agreed to a $38.5 million combined settlement for cleanup of this site and two others in Michigan—the Gratiot County Golf Course and the Velsicol plant in St. Louis. About $13 million is for installing a clay cap, slurry wall, purge system, and transmission line for the purge water (which will be used instead of the on-site treatment facility). Velsicol will supply the clay for the cap and a deep well for injection of the purge water. EPA and the State are monitoring the construction, which is scheduled to be completed in the fourth quarer of 1985. Under the Cooperative Agreement, the State is preparing design documents for the transmission line. The work is scheduled to be completed in the third quarter of 1983.

Response category / Cleanup status code, October 1984: V R F S

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/"Superfund")

HEDBLUM INDUSTRIES
Oscoda, Michigan

Conditions at listing (December 1982): The Hedblum Industries Site is located in Oscoda, Iosco County, Michigan. The company produced stamped metal parts for the automotive industry. From 1968 until 1972, Hedblum dumped an estimated 4,000 gallons of trichloroethylene (TCE), which was used to degrease the parts, directly onto the ground. TCE contaminations was detected in 13 residential wells nearby. A municipal line was extended to supply the affected area.

Status (July 1983): Conditions at this site are currently being addressed through a Federal enforcement action against parties responsible for wastes at the site.

Response category / Cleanup status code, October 1984: F

IONIA CITY LANDFILL
Ionia, Michigan

Conditions at listing (December 1982): The Ionia City Landfill occupies 10 acres 0.8 miles of the City of Ionia, Ionia County, Michigan. From the 1950s to 1968, the city owned and operated the site for disposal of municipal wastes. A portion of the site later became a recreational area. A citizen's complaint in February 1981 led to discovery of drums at the site, both buried and on the surface. Some were on the floodplain of the Grand River. In June 1981, the State excavated about 100 drums, many containing industrial liquids and some leaking. The city placed snow fences around the excavated drums. Sampling showed that the drums contain organic solvents and heavy metals. In July 1981, the State placed monitoring wells around the site and found organics and heavy metals in ground water. Ionia's well field lies about 1 mile northwest of the site.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: F / I

K&L AVENUE LANDFILL
Oshtemo Township, Michigan

Conditions at listing (December 1982): The K&L Avenue Landfill covers 5 acres in Oshtemo Township, Kalamazoo, Michigan. It was owned and operated by Kalamazoo County from 1968 to 1975. The landfill accepted municipal and industrial wastes. Residential wells near the landfill became contaminated with organic compounds, including chloroform, trichloroethylene, and perchloroethylene. In 1979, homeowners near the site brought suit against the county. As a result, the county provided an alternative water supply and capped the landfill. The cap is not adequate, and leachate enters nearby surface waters.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

KENTWOOD LANDFILL
Kentwood, Michigan

Conditions at listing (December 1982): The Kentwood Landfill occupies 55 acres in Kentwood, Kent County, Michigan. Until 1972, the site was used as an open dump. From 1972 until 1975, Kent County operated the site as a municipal landfill. The landfill reportedly received unidentified hazardous wastes. The county installed a leachate collection system, but maintenance problems led to contamination of nearby Plaster Creek with leachate containing cyanide and heavy metals.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

LIQUID DISPOSAL, INC.
Utica, Michigan

Conditions at listing (July 1982): The Liquid Disposal, Inc., (LDI) Site covers 6 acres in Utica, Macomb County, Michigan. The site contains an incinerator for liquid wastes, various industrial liquids and sludges in two lagoons, numerous surface and buried tanks, over 1,000 drums, and numerous small containers. Following an incident in which hydrogen sulfide gas was produced and killed two workers, the citizens of Shelby Township filed suit in January 1982 to permanently enjoin LDI from operating. In April 1982, LDI was forced into involuntary bankruptcy and closed permanently in May 1982. EPA and State investigations have revealed contamination of air, soil, surface water, and ground water in the vicinity of the site. In May 1982, EPA cleaned up a PCB-contaminated oil spill at the site. In July 1982, EPA removed liquid wastes from a lagoon that was in danger of overflowing and also removed contaminated water from the area surrounding the incinerator. A total of $319,000 was expended on these cleanups.

Status (July 1983): In April 1983, EPA awarded a $346,732 Cooperative Agreement to Michigan for a remedial investigation/feasibility study to determine the type and extent contamination at the site and identify alternatives for remedial action. In May 1983, $580,000 were approved for a third emergency action involving disposing of wastes in two lagoons, overpacking leaking drums, and removing miscellaneous wastes from the site. The action is scheduled for completion in the summer of 1983.

Response category / Cleanup status code, October 1984: R F / O

MASON COUNTY LANDFILL
Pere Marquette Township, Michigan

Conditions at listing (December 1982): The Mason County Landfill occupies 3 acres in Pere Marquette Township, Mason County, Michigan, about 1 mile east of Lake Michigan. From late 1971 until August 1978, it was operated for the county by Acme Disposal. While in operation, the landfill received residential, commercial, and industrial refuse, as well as liquid wastes and sludges. In 1979, it was covered with 2 feet of clay. After that, the site and adjacent land eroded and may have polluted ground water and nearby Iris Creek. Ground water contaminants include pentachlorophenol, trichloroethylene, 1,2-trans-dichloroethylene, and 1,1-dichloroethane. In late 1978, Acme Disposal was ordered to install additional monitoring wells, analyze water samples, and survey the site. A Consent Order was subsequently issued to cover the items that remained to be completed. In late 1981 and early 1982, residents filed two suits against the county and Acme.

Status (July 1983): Conditions at this site are currently being addressed through an enforcement action against parties responsible for wastes at the site.

Response category / Cleanup status code, October 1984: D

MCGRAW-EDISON CORP.
Albion, Michigan

Conditions at listing (December 1982): The McGraw-Edison Corp. Site covers 5 acres in Albion, Calhoun County, Michigan. The company manufactured air conditioners, humidifiers, and similar equipment until it closed in 1980. From 1970 to 1980, still bottoms (an oil waste) contaminated with trichloroethylene (TCE) were spread on the site's dirt roads to control dust. As a result, TCE has been found in two on-site wells and 45 nearby residential wells. The Albion municipal wells also show TCE contamination.

Status (July 1983): Conditions at this site are currently being addressed through an enforcement action aganist parties responsible for wastes at the site.

Response category / Cleanup status code, October 1984: V

METAMORA LANDFILL
Metamora, Michigan

Conditions at listing (September 1983): The Metamora Landfill occupies about 80 acres (about 50 actually landfilled) in a mostly rural area in Metamora, Lapeer County, Michigan. The privately-owned site operated from 1966 to 1980. The generators, amounts, and types of wastes buried at the site are unknown. A magnetometer survey conducted by the State indicated as many as 35,000 drums could be buried. The 100 exposed drums contain ethyl benzene, chloroform, toluene, xylene, and other organic chemicals. Ground water is contaminated with heavy metals, according to the State, although no residential wells have been contaminated to date. Several fires occurred at the site in 1972 and 1979.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

NORTHERNAIRE PLATING
Cadillac, Michigan

Conditions at listing (July 1982): The Northernaire Plating Site covers 1 acre in Cadillac, Wexford County, Michigan. On the site, an inactive electroplating facility, are 2,000 gallons of plating sludge, 2,500 gallons of liquid plating solution in containers, and drums containing wastes contaminated with chrome and cyanide. A large volume of wastes released through an improperly sealed sewer line has contaminated ground water and soil. Two private wells are contaminated, and the Cadillac Well Field is threatened by surface and subsurface releases from the site.

Status (July 1983): EPA recently prepared a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

In July 1983, EPA took emergency actions to clean up the site.

Response category / Cleanup status code, October 1984: R / O

NOVACO INDUSTRIES
Temperance, Michigan

Conditions at listing (December 1982): Novaco Industries operates a chrome plating facility on a 2-acre site in Temperance, Michigan. In June 1979, a buried tank leaked about 100 gallons of a hard-chrome plating solution over an unknown period. Three private wells plus the company well are contaminated with hexavalent chromium. In the summer of 1979, the company recovered and treated 50,000 gallons of contaminated ground water, then suspended operations due to freezing weather. Cleanup operations were never resumed.

Status (July 1983): Conditions at this site are currently being addressed through an enforcement action against parties responsible for wastes at the site.

Response category / Cleanup status code, October 1984: F

ORGANIC CHEMICALS, INC.
Grandville, Michigan

Conditions at listing (December 1982): Organic Chemicals, Inc., occupies 20 acres in Grandville, Michigan. The facility reclaims spent solvents and manufactures small quantities of various organic chemicals. From at least September 1974 to June 1980, the facility discharged process waste water and other water to a seepage lagoon on the site, contaminating ground water. Analyses detected 3,586 parts per million (ppm) total organic carbon, as well as methylene chloride, toluene, trichloroethylene, 1,1-dichloroethane, and almost 70 other substances. In April 1976, Organic Chemicals applied for a State Ground Water Discharge Permit, which was granted in January 1977. It required monitoring for pH, phenol, oil, and grease, and the diversion of process wastes to the Grandville sanitary system. The permit limits for these parameters were exceeded on several occasions. The State issued a Notice and Order to Comply in 1977, when the company failed to comply with the permit time schedule. In late 1981, the company removed accumulated sludges from the former cooling water pond on the site and filled it with clean material.

Status (July 1983): Conditions at this site are currently being addressed through an enforcement action against parties responsible for wastes at the site.

Response category / Cleanup status code, October 1984: D

OSSINEKE GROUND WATER CONTAMINATION
Ossineke, Michigan

Conditions at listing (December 1982): The Ossineke Ground Water Contamination Site is near Ossineke, Alpena County, Michigan. Starting in 1977, several shallow wells were contaminated with benzene, xylene, trichloroethylene, and chloroform. A deeper aquifer, about 70 feet below the surface, is providing water that has not been found to be contaminated to date. The State identified a laundromat and a gasoline station as potential sources of the contamination.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

OTT/STORY/CORDOVA CHEMICAL CO.
Dalton Township, Michigan

Conditions at listing (July 1982): The Ott/Story/Cordova Chemical Co. Site is in Dalton Township, Muskegon County, Michigan. Various companies, including Ott Chemical and Story Chemical, occupied the site between 1957 and 1977, when it abandoned by Story Chemical. In that period, waste water was placed in seepage lagoons, resulting in extensive contamination of ground water and soil. Unprotected tanks of phosgene gas were on-site, as well as 8,700 drums. Before acquiring the facility in late 1977, Cordova Chemical Co. and the State entered a Stipulation and Consent Order whereby Cordova agreed to neutralize and dispose of the phosgene gas and pay $600,000 to the State to deal with the other problems at the site. The State agreed to use $500,000 to remove the drums and 8,000 cubic yards of sludges and contaminated soil, and to use $100,000 to plan an alternative water suply system for affected residents.

About 1.2 billion gallons of ground water contaminated with organic chemicals are currently moving into Little Bear Creek and its tributary, seriously degrading 1 mile of stream.

Status (July 1983): All drums were removed from the site, and a municipal water line was extened to residents with threatened or contaminated wells.

Response category / Cleanup status code, October 1984: R / O

PACKAGING CORP. OF AMERICA
Filer City, Michigan

Conditions at listing (December 1982): Packaging Corp. Of America (PCA) operates a kraft paper mill on a 2-acre site in Filer City, Manistee County, Michigan. From the 1950s until 1974, PCA dumped untreated pulp mill black liquor and other process wastes in a series of unlined lagoons in Stronach Township, about 1 mile northeast of Filer City. In 1976, the Village of East Lake, to the northwest of the site, abandoned a municipal well because of contamination caused by the lagoons. In 1978, PCA placed nine monitoring wells around the site. EPA sampling in August 1981 detected high levels of heavy metals and arsenic in ground water. Ground water in the region flows toward Manistee Lake, an important recreational resource.

Status (July 1983): Conditions at this site are currently being addressed through an enforcement action against parties responsible for wastes at the site.

Response category / Cleanup status code, October 1984: F

PETOSKEY MUNICIPAL WELL FIELD
Petoskey, Michigan

Conditions at listing (December 1982): The Petoskey Municipal Well Field is in Petoskey, Emmit County, Michigan, on the shore of Little Traverse Bay and the delta of the Bear River. It is the city's sole source of water. In September 1981, the State detected 20 to 50 parts per billion of trichloroethylene in the city's water supply. An adjacent die casting and plating firm, Petoskey Manufacturing, was suspected of being the source of contamination. The company commissioned an extensive hydrogeologic investigation to determine the extent of its responsibility, if any.

Status (July 1983): The city appropriated funds for new wells and installed monitoring wells in the new field. The State is reviewing Petoskey Manufacturing's proposed investigation.

Response category / Cleanup status code, October 1984: F

RASMUSSEN'S DUMP
Green Oak Township, Michigan

Conditions at listing (December 1982): Rasmussen's Dump occupies 5 acres in Green Oak Township, Livingston County, Michigan. The owner buried an unknown number of drums of paint sludge and liquid waste and also dumped liquid wastes directly into the ground. The dump was unable to meet State licensing requirements and closed in 1974. Later, gravel mining removed the old fill material, uncovering numerous drums. Soil near the drums showed high concentrations of PCBs, although contamination of ground water or surface water has not been documented at this time.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

ROSE TOWNSHIP DUMP
Rose Township, Michigan

Conditions at listing (July 1982): The Rose Township Dump covers 10 acres. It is one of three sites within a 5-square-mile-area in Rose Township, Oakland County, Michigan. About 5,000 drums of liquid industrial wastes (paint sludges, solvents, oils, PCBs, and greases) were buried or deposited on the surface of the three sites. Some may have been emptied into the ground or pits so that the drums could be recycled. The State removed most of the drums in 1980. Ground water, surface water, and soils remain contaminated.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

SHIAWASSEE RIVER
Howell, Michigan

Conditions at listing (December 1982): The Shiawassee River Site is in Howell, Livingston County, Michigan. Since 1969, the Cast Forge Co. has manufactured aluminum cast products in Howell. Until 1973, waste water contaminated by hydraulic fluids containing PCBs was discharged to the South Branch of the Shiawassee River. From 1973 to 1977, waste water was discharged into a 400,000-gallon on-site lagoon. Discharges from this lagoon, as well as periodic overflows, have contaminated nearby wetlands and subsequently the Shiawassee River. In 1978 and 1979, the State detected high levels of PCBs in soils around the site and in on-site monitoring wells. Concentrations above 1 part per million were found in Shiawassee River sediments for 14 miles downstream of the plant. PCBs were also found in fish as far as 52 miles downstream of the plant.

In November 1977, the State filed suit against Cast Forge for PCB contamination of the environment. The case was settled through a Consent Judgment in June 1981. Under that settlement, the company removed the lagoon, cleaned up PCB-contaminated soil and sediment from its property, and provided $750,000 for restoration of the Shiawassee River.

Status (July 1983): The State's program for dredging contaminated sediments from the South Branch of the Shiawassee River began in June 1982.

Response category / Cleanup status code, October 1984: D

SOUTHWEST OTTAWA COUNTY LANDFILL
Park Township, Michigan

Conditions at listing (December 1982): The Southwest Ottawa County Landfill covers 40 acres in Park Township, Ottawa County, Michigan. The landfill, constructed and licensed by the State in 1968, received municipal refuse, industrial sludges, and sludges from waste water treatment plants. The State detected aromatic hydrocarbons and heavy metals in monitoring wells around the site. Several private wells are also contaminated. The State closed the site in 1981 and required the county to cover the landfill, provide hookups to the municipal water sytem for residents with potentially affected wells, and undertake a 5-year program of postclosure care.

Status (July 1983): The county is conducting a study to assess the feasibility of installing a system to treat ground water.

Response category / Cleanup status code, October 1984: S

SPARTA LANDFILL
Sparta Township, Michigan

Conditions at listing (December 1982): Sparta Landfill is located in Sparta Township, Kent County, Michigan. Prior to 1965, Sparta Township and a private firm operated the landfill. The site was purchased in 1970 by Kent County and until 1977 accepted municipal refuse, foundry sand, and industrial wastes. In 1979, toluene and several other organic solvents were found in on-site monitoring wells and off-site residential wells. At the request of the State, Kent County installed deep wells for two nearby affected residences and provided bottled water for other affected homes.

Status (July 1983): Conditions at this site are currently being addressed through an enforcement action against parties responsible for wastes at the site.

Response category / Cleanup status code, October 1984: 5

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/"Superfund")

SPARTAN CHEMICAL CO.
Wyoming, Michigan

Conditions at listing (December 1982): The Spartan Chemical Co. Site covers 2 acres in Wyoming, Michigan. Since 1952, the company has blended, packaged, and distributed chemicals, including industrial solvents and thinners. Nearby residential wells have becom contaminated with trichloroethylene, perchloroethylene, chloroform, and other organic compounds. These wells have been abandoned and residences connected to a municipal water supply.

Status (July 1983): Conditions at this site are currently being addressed through an enforcement action against parties responsible for wastes at the site.

Response category / Cleanup status code, October 1984: D

SPIEGELBERG LANDFILL
Green Oak Township, Michigan

Conditions at listing (December 1982): The Spiegelberg Landfill covers 10 acres in Green Oak Township, Livingston County, Michigan. Prior to 1966, the site was an open dump. About 1977, unknown quantities of paint sludges and liquid waste were dumped into a 0.5-acre pit from which sand and gravel had been excavated. Later, the pit was covered with gravel. Disposal of paint sludges ceased, but excavation of sand and gravel continues elsewhere on the site. All operations have been under private ownership.

Status (July 1983): The State completed a limited study to detect ground water contamination. EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

SPRINGFIELD TOWNSHIP DUMP
Davisburg, Michigan

Conditions at listing (December 1982): The Springfield Township Dump covers 5 acres near Davisburg in rural Oakland County, Michigan. Between 1966 and 1968, and possibly longer, drums of liquid industrial wastes (including paint sludges, solvents, PCBs, oils, and greases) were buried in or dumped onto the ground to reclaim the drums. In 1980, the State removed most contaminants. Most soils remain contaminated with PCBs, other organic chemicals, and metals. Ground water below the dumping area is also contaminated with organic chemicals, but nearby residential wells are not contaminated as yet.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

STURGIS MUNICIPAL WELLS
Sturgis, Michigan

Conditions at listing (September 1983): During routine sampling, the State determined that two of the four municipal wells that serve 13,000 people in Sturgis, Michigan, are contaminated with trichloroethylene, perchloroethylene, and other solvents. The two contaminated wells are used only as a standby source of water during peak demand periods. The State has advised against using contaminated wells.

Status (June 1984): The City of Sturgis has increased the capacity of one of the uncontaminated wells and is exploring sites for a new well.

Response category / Cleanup status code, October 1984: D

SCA INDEPENDENT LANDFILL
Muskegon Heights, Michigan

Conditions at listing (December 1982): SCA Independent Landfill occupies 5 acres in Muskegon Heights, Muskegon County, Michigan. From 1965 to the late 1970s, it accepted domestic and industrial wastes. Site soil is sandy, and the water table is 5 to 7 feet below the surface. Methane gas was detected on the site, which is within 0.3 miles of residences. A portion of the site was treated with bentonite to prevent migration of contaminants. However, problems have been detected with the bentonite liner. Xylene, benzidine, dichlorobenzidine, 1,1-dichloroethane, and toluene were detected in monitoring wells downgradient of the site. Surface water is also contaminated.

Status (July 1983): Conditions at this site are currently being addressed through an enforcement action against parties responsible for wastes at the site.

Response category / Cleanup status code, October 1984: D

TAR LAKE
Mancelona Township, Michigan

Conditions at listing (December 1982): The Tar Lake Site consists of a shallow 4-acre pond in Mancelona Township, Antrim County, Michigan. From the 1880s until 1944, Antrim Iron Co. disposed of wastes in the pond. The company's complex included a saw mill, chemical plant, iron extraction and smelting plant, and steel mill. As early as 1949, the State detected ground water contamination as far as 3 miles from the site. Sludge deposits in Tar Lake contain high concentrations of heavy metals and phenol. Analysis of area residential wells in 1980 detected lead and phenol.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

U.S. AVIEX
Howard Township, Michigan

Conditions at listing (December 1982): The U.S. Aviex Co. Site covers 2 acres in Howard Township, Cass County, Michigan. The company produces various automobile solvents. In 1972, several residential wells southwest of the plant were contaminated with ether from a leaking transmission line on-site. The line was repaired, and the company replaced three wells. In November 1978, fire destroyed most of the facility and released a number of organic compounds into the soil and ground water. Dichloromethane, benzene, toluene, and other chemicals were detected in nearby residential wells. In early 1982, the State filed suit against the company. The court ordered U.S. Aviex to conduct a pump test in preparation for possible purging and treatment of contaminated ground water.

Status (July 1983): U.S. Aviex completed the court-ordered test in the spring of 1983 and has begun purging operations.

Response category / Cleanup status code, October 1984: S

VELSICOL CHEMICAL CORP. (ST. LOUIS PLANT)
St. Louis, Michigan

Conditions at listing (December 1982): The Velsicol Chemical Corp. Site occupies 50 acres in St. Louis, Michigan. The plant, once owned by Michigan Chemical Co., manufactured a variety of chemicals, including polybrominated biphenyls and TRIS. Discharges from the plant and poor housekeeping practices have contaminated the Pine River and soils and ground water at the site with these compounds. The plant closed in 1978, and all buildings have been removed. In November 1982, Velsicol agreed to a $38.5 million combined settlement for cleanup of this site and two others in Michigan—the Gratiot County Landfill and the Gratiot County Golf Course.

Status (July 1983): Containment activities, including capping and placement of underground slurry walls around the site, started May 12, 1983. The State and EPA are monitoring these activities. All construction-related activities for containment are scheduled to be completed in November 1984.

Response category / Cleanup status code, October 1984: V F S / O

VERONA WELL FIELD
Battle Creek, Michigan

Conditions at listing (December 1982): The Verona Well Field covers 160 acres in Battle Creek, Michigan. It supplies all water for the city's 35,000 residents, as well as several major food-producing industries in the area. Of the 31 wells in the well field, 20 are contaminated with trichloroethylene and other volatile organic chemicals. These compounds are being introduced into the distribution system at low levels. Private wells near the well field are also contaminated.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site. In July 1983, EPA began providing bottled water to about 100 nearby residences and businesses with private wells. This activity will cost about $20,000 until September 1983, when a State-funded program to extend a water main is completed.

Response category / Cleanup status code, October 1984: R F S / O

WASH KING LAUNDRY
Pleasant Plains Township, Michigan

Conditions at listing (December 1982): Wash King Laundry, a small privately-owned laundromat, has been in operation in Pleasant Plains Township, Lake County, Michigan, since 1962. During the early 1970s, dry cleaning solvents were discharged with laundry wastes to the facility's waste water lagoons. As a result, about 30 residential water supplies to the north were contaminated with perchloroethylene (PCE). PCE contamination was first detected in August 1977 in a well used by a local business. In 1978, the State cleaned out the laundromat's lagoons and forced the firm to stop using PCE. A preliminary study conducted in 1979 by the State established that Wash King Laundry was responsible for the PCE contamination. A contaminated plume of ground water is migrating to the northeast toward the Middle Branch of the Pere Marquette River.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: S

WHITEHALL WELL FIELD
Whitehall, Michigan

Conditions at listing (December 1982): The Whitehall Well Field provides water to residents of Whitehall, Michigan. In January 1981, the State detected perchloroethylene (PCE) in Well Number 3. The city stopped using the well and increased pumping rates at the other four municipal wells. Number 3 is used only on an emergency basis. In February 1981, two monitoring wells close to Well Number 3 were found to be contaminated with high levels of trichloroethylene and cis-1,2dichloroethylene, in addition to low levels of PCE and 1,1-dichloroethane. Limited sampling detected the same chemicals in residential wells northeast of Well Number 3. The several suspected sources of contamination are spread over a relatively wide area because of uncertainly about the direction of ground water flow.

Status (July 1983): EPA recently installed five monitoring wells. Further activities are pending.

Response category / Cleanup status code, October 1984: R

ARROWHEAD REFINERY CO.
Hermantown, Minnesota

Conditions at listing (September 1983): Arrowhead Refinery Co. reclaimed waste oil in Hermantown, St. Louis County, Minnesota, from 1945 to February 1977. The operations generated 7,000 cubic yards of a highly acidic, metal-laden sludge, which was disposed of in a 2-acre lagoon on the property. Analyses conducted by the State indicate that the ground water and surface water near the site are contaminated with PCBs, phenols, cyanide, lead, barium, arsenic, cadmium, chromium, and selenium.

Several residents living as close as 0.3 miles from the site have drinking wells that tap the ground water contaminated by the Arrowhead site. Recent analysis of monitoring wells and surface water by the State confirms that contaminants continue to migrate from the site. For example, the closest monitoring well to the site contained about 25 percent oil when it was sampled in June 1980. In November 1982, it contained more than 75 percent oil contaminated with 25 parts per million PCBs.

In 1980, EPA, using $36,806 made available under Section 311 of the Clean Water Act, diverted surface water and installed a fence around the site. EPA also completed an investigation of the site's impact on soil, ground water, and surface water.

Status (June 1984): EPA is starting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R

BOISE CASCADE/ONAN CORP./MEDTRONIC, INC.
Fridley, Minnesota

Conditions at listing (September 1983): From the mid-1920s to the early 1960s, Boise Cascade preserved railroad ties and poles with creosote and pentachlorophenol on a 170-acre site in Fridley, Minnesota. The northern portion of the site is now owned by Onan Corp., and the remainder by Medtronic, Inc. Waste water containing creosote and oil collected in two lagoons on what is now Medtronic property. Soil and ground water on both properties have been extensively studied by consultants representing the two owners. Monitoring wells on-site have detected elevated levels of polynuclear aromatic hydrocarbons and phenolic compounds. Sediments from Rice Creek and Norton Creek contain the same contaminants, as do soil borings throughout the site. Creosote sludge was also found at the bottom of a deep multiaquifer well on the site. Ground water is the route of major concern because Moundsview and Fridley municipal wells are nearby. Ground water contamination could affect nearly 20,000 people.

Status (June 1984): Medtronic has entered into a Consent Decree with the State for its portion of the site. The cleanup is scheduled to be completed by the end of the summer of 1984.

For the Onan portion of the site, Onan, Boise, and two railroads are now in court to decide responsibility and remedy.

Response category / Cleanup status code, October 1984: S / I

BURLINGTON NORTHERN (BRAINERD/BAXTER PLANT)
Brainerd/Baxter, Minnesota

Conditions at listing (July 1982): Burlington Northern (BN) preserves railroad ties with creosote on a 70-acre site in the Brainerd/Baxter area of Minnesota. Waste water and sludges from the process have been discharged to on-site ponds since the plant's construction in 1907. The original pond was abandoned in the 1930s and covered. A second pond has been used since that time. Both probably lack any natural or constructed seal. The second pond covers about 2 acres and contains 3 feet of sludge on top of an unknown quantity of contaminated soil. Several exploratory borings confirm the existence of sludge and/or contaminated soil in the area of the original pond. On-site ground water is contaminated by a number of polynuclear aromatic hydrocarbons. The State sampled a number of area wells, most of which are north or west of the site. Ground water flows to the southeast from the site. No drinking water wells appear to be contaminated as yet, although the Mississippi River may be receiving contaminated ground water.

Status (July 1983): BN stopped discharging into the second pond in late 1982. The company also started a ground water investigation on-site, then expanded it at the request of the State to include off-site areas between the plant and the Mississippi River. BN is also investigating methods by which to remove and dispose of or treat sludges and contaminated soils, and recently hired a consultant to begin a remedial investigation to determine the extent of contamination at the site.

Response category / Cleanup status code, October 1984: F S

FMC CORP. (FRIDLEY PLANT)
Fridley, Minnesota

Conditions at listing (July 1982): The FMC Corp. Site occupies about 18 acres in Fridley, Minnesota, adjacent to the Mississippi River. From the early 1950s to the early 1970s, FMC, formerly Northern Pump Co., disposed of hazardous wastes (including solvents, paint sludges, and plating wastes) at two on-site locations, one an 11-acre unlined landfill. Records indicate that solvents and sludges were dumped directly into unlined pits and burned or buried. Three wells used by FMC for drinking and processing water are contaminated with various toxic organic chemicals, including trichloroethylene, dichloroethylene, and methylene chloride. Fridley and Brooklyn Center draw drinking water from the contaminated aquifer. The ground water also discharges into the Mississippi River, which supplies water to Minneapolis 800 feet downstream of the FMC property. Low levels of trichloroethylene have been found in the city's drinking water.

Status (July 1983): On June 8, 1983, FMC, the State, and EPA entered an agreed order under Section 106 of CERCLA. That order provides, among other things, that FMC construct a large clay-lined vault on an uncontaminated portion of the site and place in it about 58,000 cubic yards of contminated soils excavated from the site and from an adjacent property owned by the Burlington Northern Railroad. FMC did so by June 30, 1983. The order further provides for FMC to reimburse Minnesota and EPA for expenses (both past and future) related to the order and to apply to EPA for a permit (under the Resource Conservation and Recovery Act) for the vault. Finally, FMC has agreed to conduct a study to determine the extent of ground water contamination at the site and a feasibility study to identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: V F S / O

GENERAL MILLS CORP./HENKEL CORP.
Minneapolis, Minnesota

Conditions at listing (September 1983): Henkel Corp. operates in an industrial and residential area of Minneapolis, Minnesota. Before selling the site to Henkel, General Mills Corp. operated a research laboratory there from about 1947 to 1962. During that time, General Mills disposed of about 1,000 gallons per year of laboratory solvents in a dry well to a depth of 10 feet. The State's analyses of soil, shallow ground water, and the deeper bedrock Prairie du Chien-Jordan aquifer detected volatile organic compounds. Both aquifers recharge the Mississippi River, from which Minneapolis obtains its drinking water. The Town of St. Anthony (population 8,000) obtains its drinking water from the Prairie du Chien-Jordan aquifer, but its wells are about 2.5 miles upgradient from the site.

The State has been working with General Mills to complete the investigation and cleanup of the site.

Status (June 1984): The State is developing a Consent Order for General Mills to complete the investigation and cleanup of the site.

Response category / Cleanup status code, October 1984: S

JOSLYN MANUFACTURING & SUPPLY CO.
Brooklyn Center, Minnesota

Conditions at listing (September 1983): Joslyn Manufacturing & Supply Co. treated wood on a 93-acre site adjacent to Twin Lakes in the urban community of Brooklyn Center, Hennepin County, Minnesota. The plant, which operated from 1920 to 1980, used processes involving creosote, pentachlorophenol, and copper-arsenic solution. Before the 1960s, the plant was called Consolidated Pole Treating Co. and before the 1940s, Naugle Pole and Tie Co.

In 1944, this facility discharged its waste water to a marshy area connected to Twin Lakes. Later, an unlined surface impoundment adjacent to the marsh was used. In the 1970s, an oil reclamation unit preceded the surface impoundment. In 1976, 216,000 gallons were discharged to the surface impoundment. Waste sludge has also been buried on the site. Sampling and analysis conducted for Brooklyn Center in 1961 and by the State in 1980 showed that a number of nearby residential wells are contaminated by phenol and pentachlorophenol.

Joslyn completed a ground water investigation in October 1981.

Status (June 1984): In September 1983, the State issued a Request for Response Action to Joslyn, which requires the company to conduct a remedial investigation/ feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. The company continues to negotiate with the State.

Response category / Cleanup status code, October 1984: F S

KOPPERS COKE
St. Paul, Minnesota

Conditions at listing (December 1982): The former Koppers Coke Site covers about 45 acres in Midway Industrial Park in St. Paul, Minnesota. From 1911 to 1979, Koppers operated a facility that converted coal to coke and produced such by-products as coal tars and coal tar distillates. The company has dismantled and removed all equipment from the site and completed an intensive on-site investigation. It revealed that wastes discharged to the ground in unlined earthen pits and disposed of on the surface contaminate soil and ground water with polynuclear aromatic hydrocarbons, thiocyanate, ammonia, sulfates, phenols, oil, and grease. Based on information currently available, the contamination does not threaten St. Paul's municipal water supply, which comes from the Mississippi River north of Minneapolis.

Status (July 1983): In cooperation with the State, Koppers has been working to remove coal tar wastes and contaminated soil from the property. Thus far, Koppers has excavated and shipped 17,500 cubic yards of material to a secure disposal site in Illinois. The surface cleanup has been completed, and Koppers has sold the property to the St. Paul Port Authority, which intends to make it available to developers of the St. Paul Energy Park.

EPA and the State are investigating migration of contamination from the site.

Response category / Cleanup status code, October 1984: D

LE HILLIER/MANKATO SITE
Le Hillier/Mankato, Minnesota

Conditions at listing (July 1982): The Le Hillier/Mankato Site covers 6,400 acres in Le Hillier, just west of Mankato, Minnesota. In October 1981, the State discovered chlorinated organic solvents in the community's ground water. The contamination may come from degreasers used in cleaning local septic tanks.

Le Hillier is located in a floodplain of the Blue Earth and Minnesota River. Until 1976, when the U.S. Corps of Engineers constructed a dike around this area, it was subject to seasonal flooding. The contaminated area of Le Hillier/Mankato has permeable soils that allow liquids to infiltrate rapidly into the aquifer, thought to be 20 to 25 feet below the surface; bedrock (sandstone) is at about 60 feet.

Status (July 1983): EPA and the State are conducting a preliminary hydrogeological study of this area to determine the source(s) of contamination and the extent of the contaminated plume of ground water.

Response category / Cleanup status code, October 1984: R / O

MACGILLIS & GIBBS CO./BELL LUMBER & POLE CO.
New Brighton, Minnesota

Conditions at listing (September 1983): MacGillis & Gibbs Co. and Bell Lumber & Pole Co. operate separate wood-treatment facilities on adjacent parts of a 44-acre site in New Brighton, Ramsey County, Minnesota. These processes involve a number of materials, including creosote (not used since 1960), pentachlorophenol, and a chrome-copper-arsenic solution (used by MacGillis from 1970 to the present). Between 1920 and 1974, sludges from these operations were discharged to a surface impoundment in a wetland on the site. Contaminants from the disposal site have migrated from the impoundment into the surrounding ground water, according to analyses conducted by the two companies. Nearby wells into the aquifer periodically contain low levels of the chemicals used at the site.

Status (June 1984): The State is negotiating a Consent Order with the two companies.

Response category / Cleanup status code, October 1984: S

MORRIS ARSENIC DUMP
Morris, Minnesota

Conditions at listing (September 1983): Morris Arsenic Dump covers 5 acres in a rural area outside Morris, Stevens County, Minnesota. In the late 1930s, burlap bags of arsenic-laced grasshopper bait were buried in a Minnesota Department of Transporation gravel pit. Tests by EPA have detected arsenic in the shallow ground water. No private drinking water wells in the area have been affected to date.

Status (June 1984): EPA will soon be starting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R

NEW BRIGHTON/ARDEN HILLS
New Brighton, Minnesota

Conditions at listing (July 1982): The New Brighton/Arden Hill Site covers 69,120 acres in the New Brighton/Shoreview/Arden Hills area of Ramsey County, Minnesota. In June 1981, the State discovered trichloroethylene (TCE) and other organic chemicals in the Prairie du Chien-Jordan aquifer, which supplies drinking water to several communities. The plume of contaminated ground water is believed to be 6 miles along, 3 miles wide, and affect approximately 38,000 residents. Several suspected source of contamination have been identified.

Status (July 1983): The State, in coordination with EPA, is making a hydrogeological study of the area to determine the type and extent of contamination and is also monitoring suspected sources to determine what they disposed of in the past, when record-keeping was not strictly regulated. The Department of the Army is making an extensive hydrogeological study of the Twin Cities Army Ammunition Plant in New Brighton. Both the State and EPA have met with Army officials to coordinate all phases of the study. The Army is also furnishing bottled water to homes with wells containing high levels of TCE.

In June 1983, EPA signed a $1,467,242 Cooperative Agreement with Minnesota for a remedial investigation to determine the type and extent of contamination at the site. It is scheduled to be completed in the fourth quarter of 1984.

Response category / Cleanup status code, October 1984: R / O

NUTTING TRUCK & CASTER CO.
Faribault, Minnesota

Conditions at listing (September 1983): Nutting Truck & Caster Co. manufactures and distributes casters, wheels, hand trucks, and similar products in Faribault, Minnesota. The company began operation in 1891 and currently occupies 225,000 square feet of space on about 11 acres of land. The processes now in use are: aluminum and iron casting, machining, painting, rubber molding, welding, and woodworking. A waste survey by the State in early 1979 discovered that Nutting discharged some of its liquid and semisolid wastes to a seepage pond adjacent to the manufacturing building. Nutting stopped using the pond and in 1979, then pumped it out and disposed of liquid wastes in a municipal sewer. The sludge from the pond was landfarmed on the site during 1980 under a State permit. Nutting met the conditions of the permit, one of which specified that foodchain crops could not be grown on the site without first notifying the State. The pond has been filled with clean soil and paved for parking.

Ground water adjacent to and downgradient from the pond is contaminated with volatile organic compounds, including trichloroethylene (TCE), according to analyses conducted by the State. Five municipal wells in Faribault contain TCE, one beyond safe drinking water limits. These wells are downgradient from the shallow ground water. So far, adjustments of pumping rates have kept TCE concentrations in Faribault's central reservoir within human health standards. Private wells are not contaminated to date.

The State continues to monitor the Faribault municipal wells twice a month for volatile chlorinated organic compounds, especially TCE.

Status (June 1984): A Consent Order was signed on April 26, 1984 requiring Nutting to conduct an investigation of the extent of ground water contamination originating from its property. If necessary, Nutting will prepare a feasibility study, based on the results of the investigation, to identify alternatives for remedial action. The work plan for the investigation is to be delivered to the State by mid-June 1984.

Response category / Cleanup status code, October 1984: S

NL INDUSTRIES/TARACORP/GOLDEN AUTO
St. Louis Park, Minnesota

Conditions at listing (October 1981): National Lead (NL) Industries, Inc., operated a secondary lead smelter on about 10 acres in St. Louis Park, Minnesota, from the 1930s to August 1979. NL sold a portion of the site to Golden Auto Parts, Inc., in the early 1960s and the remainder to Taracorp, Inc., in August 1979. Large amounts of lead slag from the plant's early operations were buried in a part of the site later occupied by Golden Auto Parts. Starting in June 1979, air monitoring conducted by the State revealed that lead standards were frequently violated when the plant was in operation.

Status (July 1983): In May 1982, Taracorp notified the State that it was permanently closing the smelter. NL, Taracorp, and Golden Auto Parts are conducting investigations at the site to assess the impact of the buried slag and lead emissions on area soils, surface water, and ground water.

Response category / Cleanup status code, October 1984: D

OAKDALE DUMP
Oakdale, Minnesota

Conditions at listing (October 1981): The Oakdale Dump covers 40 acres in Oakdale, Washington County, Minnesota. The site consists of three adjoining properties that were used for the disposal of industrial wastes during the 1950s. The three (named for the property owner at the time of disposal) are: Abresch (the largest), a wetland in which a number of large trenches were excavated for waste burial: Brockman, used for disposal when the water level was high at Abresch; and Eberle, where solvents were spilled on the ground and ignited. Many thousands of drums of waste appear to be buried on the site, plus large quantities of other solid industrial wastes. Ground water and surface water in the area are contaminated with a wide variety of organic chemicals, including acetone and isopropyl ether.

Status (July 1983): 3M Corp., possibly one of the waste contributors, has removed surface materials and cleaned up several children's play areas on the site. 3M, the State, and EPA have reached an agreement in principle under which 3M will undertake complete remedial work at the site, including treatment of ground water.

Response category / Cleanup status code, October 1984: F

PERHAM ARSENIC SITE
Perham, Minnesota

Conditions at listing (September 1983): The Perham Arsenic Site is a small burial area covering abour 0.25 acres in Perham, Minnesota. It was discovered in 1972 when employees from a land construction company were poisoned by arsenic in the company's well. The State did extensive sampling of soil and ground water, which helped to define the boundaries of the site and to establish the extent and magnitude of ground water contamination. The source of the contamination is apparently the remains of a program in the 1930s and 1940s to control grasshopper infestations. There are probably 25 sites in Minnesota where arsenic-containing materials are buried and another 50 to 100 where they are stored above-ground. The arsenic issue remained dormant, except for monitoring of wells, until the late 1970s. Public concern with hazardous waste renewed efforts by the State to resolve the issue. The State has concluded that the arsenic and contaminated soil must be excavated to solve the ground water problem.

In May 1982, the City capped the site with a plastic film and soil to limit infiltration of rain and snow into the wastes.

Status (June 1984): A remedial investigation to determine the type and extent of contamination at the site has been completed. A feasibility study to identify alternatives for remedial action is scheduled to be completed in the summer of 1984.

Response category / Cleanup status code, October 1984: R

REILLY TAR & CHEMICAL CORP.
St. Louis Park, Minnesota

Conditions at listing (October 1981): Between 1917 and 1972, Reilly Tar & Chemical Corp. operated a coal tar distillation and wood preserving plant on 80 acres in St. Louis Park, Minnesota. Wastes from the operation were disposed of on the site and in a network of ditches that discharged to an adjacent wetland. The wastes contained many compounds, including polynuclear aromatic hydrocarbons (PAH), some of which are carcinogenic. Soil and ground water below the wetland and the southern portion of the site are heavily contaminated. Seven wells have been closed. All draw on the Prairie du Chien-Jordan Aquifer, which provides most of the drinking water for local communities. In the late 1970s, 28 multiaquifer wells were reconstructed to prevent the spread of contamination.

In July 1981, EPA awarded a $200,000 Cooperative Agreement to Minnesota, using funds made available under the Resource Conservation and Recovery Act (RCRA). The funds were used to clean out two deep wells on the site and conduct a complete off-site well survey. In September 1981, an additional $200,000 in RCRA funds were awarded to perform a water treatability study on the closed municipal wells.

This is the top priority site in Minnesota.

Status (July 1983): In December 1982, EPA awarded a $1,993,287 Cooperative Agreement to Minnesota to plug additional multiaquifer wells, test the State's proposed gradient system to control migration of contamination to existing wells, and conduct a remedial investigation/feasibility study of contaminated soils. The work is scheduled to be completed in the first quarter of 1984.

The Department of Justice, on behalf of EPA, has brought a Federal civil action under RCRA and CERCLA against parties potentially responsible for wastes associated with this site. The action seeks injunctive relief and the costs incurred in response actions at the site.

Response category / Cleanup status code, October 1984: R F S/I

SOUTH ANDOVER SITE
Andover, Minnesota

Conditions at listing (October 1981): The South Andover Site in Andover, Anoka County, Minnesota, is a collection of five separately-owned contiguous areas covering a total of 37 acres. Bebvan 1969 and 1976, all were used for dispose of hazardous wastes, including inks, paint thinners, paint sludges, acids, petroleum, and chlorinated solvents. Some flammable liquid wastes were burned in pits, while others may have been allowed to seep into the ground. There war also considerable spillage and leakage of wastes. In 1980, an estimated 1,000 drums (most containing ignitable wastes) were on the site, and an unknown number were suspected of being under the 10 million tires stored in one area. Since then, one owner sold and removed hundreds of the drums at one time, and unreported removal and disposal probably continue. The three shallow on-site drinking water wells are contaminated with organic chemicals and heavy metals. No other contamination of drinking water wells has been detected at this time.

This site was one listed under the name "Andover Sites."

Status (July 1983): About 370 drums are visible on-site. Most appear to be empty or contain solid, dried-out material. However, a number are full, and a few of these are leaking. In addition, some drums may be buried under the tires. Some soil is heavily contaminated. An EPA study underway indicates that the shallow aquifer is heavily contaminated at one location by what appears to be fuel oil; 10 to 100 parts per million of naphthalene, bis (2-ethylhexyl) phthalate, phenanthrene, and fluorene are also reported. However, this heavy contamination is localized and is not moving at this time.

The State negotiated unsuccessfully with the owners and about four generators for cleanup of surface wastes, monitoring, and purging of ground water at the area of high contamination. The State plans to request CERCLA funds for cleanup.

Response category / Cleanup status code, October 1984: D

ST. LOUIS RIVER SITE
St. Louis County, Minnesota

Conditions at listing (September 1983): The St. Louis River Site near Duluth, St. Louis County, Minnesota, includes the U.S. Steel Corp.'s Duluth Works and the Interlake Iron/Duluth Tar Site, as well as that portion of the St. Louis River with related contaminants.

From 1915 to 1979, the Duluth Works generated wastes containing polynuclear aromatic hydrocarbons and heavy metals from its coke, iron, steel, and wire operations. The plant covers 450 acres adjacent to the St. Louis River, an estuary to Lake Superior. Waste water from the coke and wire mill was discharged to settling basins, which in turn discharged to the St. Louis River. Ground water and surface water are contaminated, according to analyses conducted by the State, EPA, and U.S. Steel. Cloquet's municipal drinking water intake in Lake Superior, near the mouth of this river, is contaminated with varying, but low, levels of polynuclear aromatic hydrocarbons from the St. Louis River.

Interlake Iron sold coal tar and coal tar distillates to Duluth Tar, which made roofing paper. They discharged their wastes directly to the St. Louis River. Duluth Tar burned down in the last few years. Interlake Iron was in business from the 1920s to the 1950s. There is little waste apparent on-site. Sludge in the river from the operation of the two companies is the main concern.

Status (June 1984): An enforcement action was initiated by the State on Sept. 27, 1983, requiring U.S. Steel to conduct a remedial investigation/ feasibility study to determine the type and extent of contamination at the Duluth Works and identify alternatives for remedial action

Response category / Cleanup status code, October 1984: D

ST. REGIS PAPER CO.
Cass Lake, Minnesota

Conditions at listing (September 1983): The Wheeler Division of St. Regis Paper Co. has operated a 125-acre wood-treatment facility in the rural community of Cass Lake, Cass County, Minnesota, since 1957. The site is in the Chippewa National Forest and between Pike Bay and Cass Lake. The company once used creosote in its operations but now uses pentachlorophenol and a chrome-copper-arsenic solution. The waste waters and sludges generated were buried in pits or a landfill or discharged to surface impoundments. Contamination has migrated from these disposal areas into the surrounding ground water and surface water, according to tests conducted by St. Regis. Monitoring wells on the site are contaminated, but Cass Lake municipal wells are not as yet. A private well has a low level of contamination.

St. Regis has presented a proposal to the State that includes sampling of residential wells, construction and sampling of additional monitoring wells, further investigation of soil conditions, and investigations into the feasibility of remedial measures.

Status (June 1984): St. Regis is investigating site conditions and submits quarterly monitoring reports.

The State is negotiating with responsible parties to conduct a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: D

UNION SCRAP IRON & METAL CO.
Minneapolis, Minnesota

Conditions at listing (September 1983): Union Scrap Iron & Metal Co. sorted and crushed lead battery fragments on a 1-acre site in Minneapolis, Minnesota, from 1973 through 1980. Lead was separated and sold for recycling. The plastic and rubber fragments remaining, which also contain lead, accumulated in piles, which are partially covered with tarpaulins. Presently, an estimated 30,000 tons of these fragments are on the site. According to the State, airborne lead levels adjacent to the site significantly exceed background levels. There is also potential for ground water and surface water contamination.

In a Stipulation Agreement signed with the State on Aug. 22, 1983, Union Scrap agreed to remove the piles by December 1984 and conduct a soil contamination study.

Status (June 1984): Union Scrap submitted plans for removal of the piles and for the soil contamination study. The plastic and rubber fragments will be sieved to remove lead fragments, which will be recycled at Poly Metals, Inc., in St. Paul, Minnesota. The sieved plastic will be sold for recycling. The rubber fragments will be used as an additive in asphalt paving material.

Response category / Cleanup status code, October 1984: S

WASHINGTON COUNTY LANDFILL
Lake Elmo, Minnesota

Conditions at listing (September 1983): The Washington County Landfill is located south of Lake Jane in Lake Elmo, Washington County, Minnesota. It operated on a 40-acre site from 1969 to 1975, when it was closed and covered. The facility, owned and operated by Washington and Ramsey Counties, was not licensed to accept hazardous substances. Analyses by the State indicate that on-site monitoring wells and residential wells along the southwestern edge of the property are contaminated with chlorinated solvents. The State has closed three residential wells because of excessive levels of these solvents and is closely monitoring others nearby.

Status (June 1984): The two counties are funding a barrier control well on the southwestern portion of the site to intercept contaminated ground water before it reaches the residential wells. The State is negotiating a Consent Agreement with the counties regarding a solution to the ground water problem.

Response category / Cleanup status code, October 1984: S

WASTE DISPOSAL ENGINEERING
Andover, Minnesota

Conditions at listing (July 1982): The Waste Disposal Engineering (WDE) Site covers 114 acres in Andover, Anoka County, Minnesota. About 6,600 drums of hazardous wastes were placed in a 0.2-acre pit between November 1972 and January 1974. Ground water beneath the site in the upper and aquifer is highly contaminated. Contaminants include chlorinated organic compounds, benzene, and toluene. Since 1962, the rest of the landfill has handled municipal wastes.

Status (July 1983): In January 1983, Melron, Inc., stopped operation of the landfill and started to cover the site with lime sludge. (WDE merged with other companies in May 1975.)

In June 1983, the State submitted a draft Cooperative Agreement to EPA for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. It is being reviewed.

Response category / Cleanup status code, October 1984: V R F

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

WHITTAKER CORP.
Minneapolis, Minnesota

Conditions at listing (September 1983): The Whittaker Corp. Site contains several contaminated areas within a 10-acre Whittaker property, which is in an industrial area of northeast Minneapolis, Hennepin County, Minnesota. The Mississippi River flows about 1,200 feet to the west. A residential area begins several blocks to the south.

Industrial operations have been conducted at the site from the mid-1940s through 1981. Whittaker has owned most of the site since 1957, when it acquired American Petrochemical Co., the site's previous owner. Tool Tech, a manufacturer of rotary drill pipe, purchased a portion of the site in 1977. Materials manufactured and/or packaged at the site included paints, industrial coatings, and antifreezes. Paints, paint sludges, paint pigments, solvents, and still bottoms are among the wastes that may have been buried or spilled in several areas of the site. Suspicious materials were unearthed during a 1978 excavation for installation of a parking lot on Tool Tech property. The State learned of the materials in 1981.

At the request of the State, Whittaker and Tool Tech have compiled records and interviewed former employees to gather information on previous activities at the site. They have compiled some corporate records regarding past ownership and disposal practices on their properties. Whittaker has commissioned a study to determine what, if any, impacts the site has on area ground water.

Status (June 1984): The State has requested that Whittaker (1) undertake additional investigations of ground water contamination at or near the site, including resampling of existing monitoring wells and installation of three additional monitoring wells and (2) establish more clearly the types and amounts of materials buried on-site. The State is contacting other parties in the vicinity of the site for additional information.

Response category / Cleanup status code, October 1984: S

FLOWOOD SITE
Flowood, Mississippi

Conditions at listing (September 1983): The Flowood Site covers about 2 acres approximately 500 feet behind two large industrial facilities in Flowood, Mississippi. The site consists of a ditch that drains into Neely Creek. Industrial waste water was discharged without a State permit into the ditch from the 1950s until 1972. The discharge consisted of ceramic wastes, waste inks, and oil. Samples collected by the State from the ditch have high levels of lead. The primary threat from the site appears to be to Neely Creek, a tributary of the Pearl River. There are no surface water intakes downstream within 3 miles. Contamination of ground water has not been documented to date.

This is the top priority site in Mississippi.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

ELLISVILLE SITE
Ellisville, Missouri

Conditions at listing (October 1981): Three properties, Callahan (28 acres), Rosalie (65 acres), and Bliss (12 acres), near Ellisville, Missouri, are known collectively as the Ellisville Site. In 1980, a contractor unearthed buried drums of paint solvents and pesticides while constructing a sewer line at the Callahan property. Further investigation revealed two other areas where industrial wastes had been buried within a 1-mile area along Caulks Creek, a tributary of the Missouri River. Leachate is flowing from the disposal area to the creek. Ground water, which is used as drinking water, may have been contaminated.

This is the top priority site in Missouri.

Status (July 1983): In January 1982, EPA used $310,000 in CERCLA emergency funds to excavate drums and take other emergency actions at the Rosalie and Callahan sites. Since early February 1982, EPA has authorized about $500,000 (part under a Cooperative Agreement with Missouri) for (1) disposal of the excavated drums, (2) a remedial investigation to determine the type and extent of contamination at the Bliss property, and (3) a feasibility study to identify alternatives for remedial actions at all three. The work is scheduled to be completed in the third quarter of 1983.

EPA and the State have identified parties potentially responsible for wastes associated with the site, and their cooperation in the cleanup is being sought.

Response category / Cleanup status code, October 1984: R / O

FULBRIGHT LANDFILL
Springfield, Missouri

Conditions at listing (October 1981): The Fulbright Landfill is on the floodplain of the Little Sac River near Springfield, Missouri. From 1963 until 1969, the city-owned facility accepted municipal wastes, as well as industrial wastes containing cyanides, acids, plating and paint sludges, solvents, and pesticides. In 1967, a hauler died when he inadvertently dumped a drum containing acid into a pit containing cyanide.

Status (July 1983): EPA worked with the State and the City of Springfield to develop a program to monitor ground water and surface water. Initial results identified several organic compounds and metals in ground water and surface water collected at the site. The State and EPA are evaluating the monitoring data collected to date.

Response category / Cleanup status code, October 1984: D

MINKER/STOUT/ROMAINE CREEK
Imperial, Missouri

Conditions at listing (December 1982): The Minker/Stout/Romaine Creek Site covers about 10 acres near Imperial, Missouri. In 1971, the Bubbling Springs Ranch horse arena became contaminated with dioxin when a St. Louis waste oil hauler sprayed oil on it for dust control. Afterward, several horses became ill, and six or seven died. In 1972, the lessee of the arena excavated some of the dioxin-contaminated soil. Later it was used as fill material in two residential areas, one occupied by the Minker family and the other owned by the Stout family. Preliminary samples taken by EPA in May and June 1982 confirmed the presence of dioxin-contaminted soil at all three areas. In October 1982, EPA analyzed 300 samples collected in the vicinity of the two fill areas. All data were subject to vigorous quality assurance and reviewed by experts in EPA laboratories. These results confirmed the presence of dioxin in the fill areas and in sediments along 6,000 feet of Romaine Creek. The highest level of dioxin detected in the area is 301 parts per billion.

The site was once listed under the name "Arena 2: Fills 1 & 2".

Status (July 1983): In December 1982, EPA allocated about $750,000 for (1) initial remedial measures involving erosion controls and relocation of residents near the two areas, (2) a remedial investigation to determine the extent of contamination at the site, and (3) a feasibility study to identify alternatives for remedial action. In February 1983, the State signed a State Superfund Contract with EPA outlining the scope of work to be conducted at the site. It is scheduled to be completed in the first quarter of 1984.

In April 1983, the U.S. Centers for Disease Control issued a health advisory recommending permanent relocation of 11 families on or near the site. EPA then allocated $2.2 million to the Federal Emergency Management Agency for the relocation

Response category / Cleanup status code, October 1984: R / O

SHENANDOAH STABLES
Moscow Mills, Missouri

Conditions at listing (December 1982): The Shenandoah Stables Site covers about 7 acres near Moscow Mills, Lincoln County, Missouri. In May 1971, the horse arena became contaminated with dioxin when a St. Louis waste oil hauler sprayed approximately 2,000 gallons of contaminated oil for dust control. Afterward, numerous birds, rodents, and over 40 horses died. Several adults and children became ill. In August 1971, the top 6 to 8 inches of contaminated soil were excavated and used as fill material in a new highway. In April 1972, more soil was removed from the arena and placed in a swampy area on-site. EPA sampling in May and June 1982 indicated that the top 30 inches of soil in the arena contain from 1 to 127 parts per billion of dioxin.

This site was once listed under the name "Arena 1: Shenandoah Stables."

Status (July 1983): In May 1983, EPA entered into a Consent Order under CERCLA Section 106 requiring the owner of the property to limit public access to the contaminated areas until such time as cleanup measures are taken.

Response category / Cleanup status code, October 1984: V F / O

SYNTEX FACILITY
Verona, Missouri

Conditions at listing (December 1982): North Eastern Pharmaceutical and Chemical Co. produced hexachlorophene (soap) from 1969 to 1972 in Verona, Missouri, at a site leased from Hoffman-Taff Chemical Co. The facility was later acquired by Syntex Agribusiness, Inc. Dioxin was produced as a by-product during the manufacturing of trichlorophenol, which was used to make hexachlorophene. Dioxin residues were disposed of in several areas at the Verona facility. Fish taken from the Spring River, which runs by the site, are contaminated with dioxin as far as 96 miles downstream. In August 1982, Syntex signed a Consent Order with EPA under Section 3013 of the Resource Conservation and Recovery Act, agreeing to study the disposal sites and Spring River.

Status (July 1983): EPA is reviewing the results of a monitoring study by Syntex and is currently in negotiations with the company to undertake remedial actions under the terms of a Consent Order under CERCLA Section 106.

Response category / Cleanup status code, October 1984: V F / I

TIMES BEACH
Times Beach, Missouri

Conditions at listing (March 1983): The City of Times Beach (population 2,800) covers 8 square miles on the floodplain of the Meramec River in St. Louis County, Missouri. In 1972 and again in 1973, the city contracted with a waste oil hauler to spray oil on unpaved roads for dust control. It was later learned that the waste oil contained dioxin. In November and early December 1982, EPA sampled the roads and right-of-ways in Times Beach. Soon afterward, the Meramec River flooded the city. EPA expedited the sample analyses and found dioxin at levels from less than 1 part per billion (ppb) to 127 ppb. As a result, the U.S. Centers for Disease Control (CDC) issued a health advisory on Dec. 23, 1982, recommending that people relocated from Times Beach due to flooding should stay away, and that those remaining should leave. EPA resampled the area in January 1983 to determine if flood waters had deposited contaminated soil into homes and yards. In the second week of January, EPA allocated $500,000 to CDC to collect health questionnaires and examine the people of Times Beach. On Feb. 22, 1983, EPA pledged $33 million from Superfund to purchase the Times Beach property under a relocation plan to be developed and implemented by the Federal Emergency Management Agency.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at Times Beach. The next step is a feasibility study to identify alternatives for remedial action. CDC will continue its questionnaires and examinations and is also working with EPA to define cleanup levels for dioxin at Times Beach.

Response category / Cleanup status code, October 1984: R / O

ANACONDA CO. SMELTER
Anaconda, Montana

Conditions at listing (December 1982): The Anaconda Co. copper smelter covers 5,000 acres in Anaconda, Montana. It operated from the late 1800s until it closed in September 1980. For the most part, the wastes left on-site at closure still remain. The State and EPA are concerned over possible release of hazardous substances, primarily heavy metals, from the smelter wastes into surface water, ground water, and air.

Status (July 1983): The Anaconda Co. voluntarily entered into an agreement with EPA and the State for a study to identify and quantify hazardous materials at the smelter. The sampling and analysis of the results have been completed by the parties to the agreement.

EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. EPA is also negotiating with the company to have it take interim remedial measures to stabilize conditions at the site.

Response category / Cleanup status code, October 1984: V R

EAST HELENA SITE
East Helena, Montana

Conditions at listing (September 1983): The East Helena Site (proposed for listing as the East Helena Smelter) covers 8.4 square miles near East Helena, Montana. A primary lead and zinc smelter now owned by ASARCO has operated on the site since about 1888. The smelter has emitted particulates containing metals (including lead, cadmium, and arsenic) into the air throughout its history. Recent data obtained by EPA and the State indicate that the upper soil on the site contains at least 1,000 parts per million (ppm) of lead. The EPA Lead Smelter Study Task Force has recommended that values of 1,000 ppm or greater warrant further investigation. There are concerns that the soil can be reentrained into the air as inhalable particulates, can be directly ingested (especially by young children), and can contaminate surface water and ground water. Analyses in 1975 indicated that children in East Helena had elevated levels of lead in their blood.

Several activities are underway at the site: (1) EPA has signed a Cooperative Agreement with the Montana office of the U.S. Geological Survey (USGS) to develop a plan to investigate ground water flows and possible metal contamination in the study area; (2) the U.S. Centers for Disease Control (CDC) and EPA have awarded money to the State for a health screening study of East Helena children in July-August 1983; and (3) EPA is preparing a contract to have Montana State University develop a plan to gather soils and vegetation data, which will better define the extent and nature of the area's soil contamination and its effects on the environment.

Status (June 1984): USGS has completed a preliminary survey involving sampling of area domestic wells. No wells sampled were above drinking standards for the target metals -- arsenic, cadmium, and lead. The screening study by the State and CDC found only one East Helena child with a mean blood lead level over the level at which CTC recommends treatment. East Helena children do have levels higher than those of the control group in the study. Nearly 2,000 environmental samples, plus hair and stool samples, remain to be analyzed. Results are expected in late summer of 1984.

A work plan to guide the remedial investigation/feasibility study has been completed and was released to the public on June 1, 1984. This plan includes: (1) surface water investigations; (2) ground water investigations; (3) soil studies to better determine the extent of metals contamination and their mobility; and (4) crop and livestock sampling. ASARCO has agreed to participate by undertaking studies of ground water and surface water.

Response category / Cleanup status code, October 1984: F

LIBBY GROUND WATER CONTAMINATION
Libby, Montana

Conditions at listing (December 1982): The Libby Ground Water Contamination Site covers 1,500 acres in Libby, Montana. In April 1979, in response to a homeowner's complaint of an irritating "creosote" odor in water from a new well, the State found elevated levels of pentachlorophenol (PCP). In September 1980, EPA, the State, and St. Regis Paper Co. discussed possible sources of contamination, including the way the company disposed in the past of creosote and other preservatives formerly used to treat wood.

In June 1981, EPA and county officials tested 11 wells in the Libby area for PCP and polynuclear aromatic hydrocarbon components of creosote. Significant levels of these contaminants were found in some wells.

Status (July 1983): St. Regis is sampling ground water to define the extent of contamination. Results are expected in July 1983.

Response category / Cleanup status code, October 1984: D

MILLTOWN RESERVOIR SEDIMENTS
Milltown, Montana

Conditions at listing (December 1982): In May 1981, Missoula County took routine samples from seven drinking water wells in Milltown, Montana. Four showed levels of arsenic that exceed the Interim Primary Drinking Water Standard. Subsequent analyses by the State confirmed that the four wells, serving a total of 35 residences, were contaminated with up to 10 times the standard of 0.05 milligrams arsenic per liter (mg/l). Residents were advised to seek alternate supplies of drinking water.

Possible sources of contamination are leachate from an abandoned landfill east of town or dissolution of metals from mill tailings, the sediments deposited behind Milltown Dam located south and immediately adjacent to the town and across the Clark Fork River. Analyses of these sediments show total recoverabe arsenic levels of up to 148 mg/l.

Status (July 1983): In June 1983, EPA awarded the State $513,000 to conduct a remedial investigation to determine the extent and sources of contamination at the site and a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the first quarter of 1985.

Response category / Cleanup status code, October 1984: R

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SILVER BOW CREEK
Silver Bow/Deer Lodge Counties, Montana

Conditions at listing (December 1982): The Silver Bow Creek Site covers about 24 stream miles in Silver Bow and Deer Lodge Counties, Montana. The creek, between where it meets Copper Creek in Butte and Warm Springs Ponds northeast of Anaconda, has been contaminated with a variety of wastes received from industrial, agricultural, and municipal activities for over 100 years. Contaminants such as heavy metals and phosphates have been detected in the creek, which is used for drinking, irrigation, and recreation.

Status (July 1983): The State is attempting to remove some of abandoned mine tailings from the banks of Silver Bow Creek to reduce its contamination.

Response category / Cleanup status code, October 1984: R

AUBURN ROAD LANDFILL
Londonderry, New Hampshire

Conditions at listing (December 1982): The Auburn Road Landfill covers 200 acres in Londonderry, New Hampshire. The site is bordered on three sides by residences and is drained by two unnamed streams that flow into the Cohas Brook, which in turn empties into the Merrimack River. From about 1950 until 1964, the town used 1 acre for disposal. Then it applied for and received State approval to receive municipal wastes. By 1968, the landfill reached its approved capacity and expanded into another site nearby. In 1970, the State found evidence that garbage from out-of-State was being received, as well as industrial wastes.

In 1974, the State approved a new 5-acre site with several modifications and conditions. In March 1979, the town sold the landfill to an individual who operated it as a private disposal site. The State soon identified hazardous wastes in the landfill and toxic organic chemicals in surface water and ground water in and around the site. In 1980, the owner stopped operation, after the State ordered the town to close the site. In 1981-1982, EPA conducted a hydrogeologic investigation of the site.

Status (July 1983): The owner in 1979-1980, Grassy Knowles Associates, and the Town of Londonderry, in response to a State order, have contracted to do the field investigations necessary to plan remedial action.

Response category / Cleanup status code, October 1984: R S

DOVER MUNICIPAL LANDFILL
Dover, New Hampshire

Conditions at listing (December 1982): The Dover Municipal Landfill occupies 55 acres in the Tallego Plains Section of Dover, New Hampshire. It is owned and has been operated by the city since 1954. At first, it accepted domestic refuse from Dover, but by the 1960s was accepting drums and loose trash from both Dover and Madbury. Materials buried include leather-tanning wastes, organic solvents, municipal trash, and sludge from the Dover waste water treatment plant. After 1975, it is believed that drums were no longer accepted. In 1977, the State installed monitoring wells around the area and found that organic solvents were entering ground water, posing a potential threat to public water supplies for Dover and Portsmouth. In May 1980, the State and Dover City Council closed the landfill.

Status (July 1983): Dover's consultant has completed a hydrogeologic investigation of the landfill, and EPA has completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. The State and EPA are negotiating a Cooperative Agreement for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. At the same time, EPA is completing a search for parties potentially responsible for wastes associated with the site.

Response category / Cleanup status code, October 1984: R

KEARSARGE METALLURGICAL CORP.
Conway, New Hampshire

Conditions at listing (September 1983): Kearsarge Metallurgical Corp. (proposed for listing as Kearsage Metallurgical Corp.) produced cast metal parts for industry on a 5-acre site in Conway, New Hampshire, from 1964 until it went out of business in January 1982. It appears that over 5 years of operation, the owner discharged hazardous materials into the ground at the rear of the facility. Sampling by the State detected 1,1,1-trichloroethane, toluene, chromium, and cadmium in ground water and chlorinated solvents in surface water near the facility. The degree of contamination is not known at this time.

Indian Head Bank North (security bank for the facility) arranged for removal of 300 drums and quantities of contaminated soil and for installation of eight monitoring wells around the site.

The State filed a Civil Action in Superior Court, Carrol County, on April 23, 1983, asking for civil penalties for disposal of hazardous waste and ordering the owner to conduct a hydrogeological study.

Status (June 1984): The owner has declared bankruptcy. The State is tentatively planning to complete a limited hydrogeologic investigation during the summer of 1984.

Response category / Cleanup status code, October 1984: S

KEEFE ENVIRONMENTAL SERVICES (KES)
Epping, New Hampshire

Conditions at listing (October 1981): Keefe Environmental Services (KES), Inc., started operating a waste bulking and transfer station on a 50-acre site in Epping, New Hampshire, in 1978. In 1979, during peak operation, wastes stored at the site included over 6,000 drums, bulk storage containers, pails, and a 750,000-gallon waste storage lagoon. In 1980, Epping and the State started legal action against the company. KES declared voluntary bankruptcy in 1981, leaving on the site flammable chlorinated and other organic chemicals, heavy-metal and paint sludges, laboratory wastes, and waste oils. Air, soil, and ground water are contaminated.

Status (July 1983): Between March 1981 and September 1982, using $1.0 millin in CERCLA emergency funds, EPA stablized drums and tanks, pumped down the lagoon three times to avoid breaching of the dike, and removed explosive and shock-sensitive materials. During this time, the State succeeded in getting the owner and some generators to remove some drums.

In September 1982, EPA approved $100,000 for design of a plan to remove the remaining drums. In September, EPA also awarded a $1,709,945 Cooperative Agreement to New Hampshire for (1) two initial remedial measures--fencing of the site and removal of the remaining drums and (2) completion of a remedial investigation and feasibility study to identify alternatives for cleanup of the waste lagoon, contaminated soils, suspected buried drums, and any contamination of ground water.

EPA has identified other parties potentially responsible for wastes associated with the site and is seeking their cooperation in the cleanup.

Response category / Cleanup status code, October 1984: V R S/ O

OTTATI & GOSS/KINGSTON STEEL DRUM
Kingston, New Hampshire

Conditions at listing (October 1981): The Ottati & Goss/Kingston Steel Drum Site consists of two parcels of land in Kingston, New Hampshire. One 28-acre parcel is owned by Senter Transportation Co., which leased about 1 acre to Ottati and Goss Corp. (O&G), 6 acres to Kingston Steel Drum Co. (KSD), and a larger area to Austin Powder Co. O&G and KSD reconditioned and rented 55-gallon drums. O&G also treated and disposed of hazardous wastes. The second parcel, consisting of about 6.5 acres, is owned by Great Lakes Container Corp.

Surface water and ground water, both on- and off-site, are contaminated with volatile organic compounds. Levels as high as 12,307 parts per billion (ppb) were detected in ground water immediately downgradient from the site, threatening future ground water supplies for the area. In addition, county pond, 0.3 miles downgradient from the site, is used for sport fishing, swimming, and other water recreation.

Status (July 1983): Between the fall of 1981 and summer of 1982, EPA used about $1.7 million in CERCLA emergency funds to remove drummed wastes from the site. In April 1983, EPA signed a $572,412 Cooperative Agreement with the State for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. The work is scheduled to be completed in the third quarter of 1984.

The Department of Justice, on behalf of EPA, has brought a Federal civil action against O&G and other responsible parties, seeking to recover costs incurred in cleaning up the site or to compel further cleanup.

Response category / Cleanup status code, October 1984: V R F S / O

SAVAGE MUNICIPAL WATER SUPPLY
Milford, New Hampshire

Condition at listing (September 1983): The Savage Municipal Wells in Milford, New Hampshire, encompass an area of about 30 acres. Routine sampling of the well field by the State detected volatile organic chemicals, including tetrachloroethylene, trichloroethylene, 1,1-dichloroethane, and 1,1,1-trichloroethane. Similar compounds were detected in adjacent surface waters. Alternative water supplies had to be installed to maintain service to existing residential and commercial units. Further investigation is needed to determine the source and extent of contamination in and adjacent to the well field.

The State has previously issued cleanup orders to parties alleged to be responsible for the discharge of volatile organic chemicals in the general area of the well field. In response, some of the parties have started hydrogeologic studies to determine the extent of contamination possibly caused by earlier industrial activities at their respective facilities.

Status (June 1984): The parties are scheduled to submit their reports to the State by the fall of 1984. The State is planning to conduct a limited hydrogeologic investigation during the summer of 1984.

Response category / Cleanup status code, October 1984: R S / O

SOMERSWORTH SANITARY LANDFILL
Somersworth, New Hampshire

Conditions at listing (December 1982): The Somersworth Sanitary Landfill covers 24 acres in Somersworth, New Hampshire. Originally, the town burned residential, commercial, and industrial wastes on the site. In 1950, the dump was converted to a sanitary landfill. Unknown quantities of sludges, solvents, acids, dyes, metals, laboratory or pharmaceutical wastes, and potash were dipoosed of at this site. Both surface water and ground water are contaminated. On-site monitoring wells detected moderate levels of carbon tetrachloride, ethyl benzene, toluene, and metals. Leachate was observed at the eastern edge of the site.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. EPA and the State are negotiating a Cooperative Agreement for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. At the same time, EPA is completing a search for parties potentially responsible for wastes associated with the site.

Response category / Cleanup status code, October 1984: R

SOUTH MUNICIPAL WATER SUPPLY WELL
Peterborough, New Hampshire

Conditions at listing (September 1983): The South Municipal Water Supply Well in Peterborough, New Hampshire, serves about 4,600 people. Routine sampling of the water supply by the State detected volatile organic compounds, including 1,1,1-trichloroethane, carbon tetrachloride, 1,1-dichloroethane, and trichloroethylene. Similar compounds were detected in adjacent surface waters. Further investigation is needed to identify the source(s) and determine the extent of contaminant migration.

Status (June 1984): The State is planning to conduct a limited hydrogeologic investigation at the site during the summer of 1984.

Response category / Cleanup status code, October 1984: S

SYLVESTER
Nashua, New Hampshire

Conditions at listing (October 1981): The Sylvester (Gilson Road) Site covers 20 acres in a residential area of Nashua, New Hampshire. During the 1970s, a 6-acre former sand/gravel pit became a dump for household refuse, demolition materials, chemical sludges, and hazardous liquids. High concentrations of heavy metals and organic chemicals contaminate the underlying ground water, which formed a plume that moved rapidly toward Lyle Reed Brook. The brook is a tributary of the Nashua River, which is a source of drinking water.

The dumping at the site was first discovered in late 1970. After several court appearances and court actions, an injunction was issued in 1976 to remove all material from the site. However, operations continued, and in November 1978, State personnel observed drums being sorted at the site. A court order was issued in October 1979 prohibiting all further disposal of hazardous wastes on the site.

Between June 1980 and June 1982, EPA, first under Section 311 of the Clean Water Act and later under CERCLA, installed a system to temporarily pump and recirculate contaminated ground water, thus preventing it from reaching Lyle Reed Brook, preventing further contamination of the aquifer, and controlling air pollution by volatile chemicals. The total cost was $925,000. In 1980, the city and the State also contributed to fencing of site, removal of 1,300 drums, and installation of alternate water supply lines.

In August 1981, EPA awarded a $2,305,600 Cooperative Agreement to New Hampshire for (1) design and construction of a slurry wall and cap to permanently contain contaminated ground water on-site, (2) a feasibility study to evaluate alternatives for treating contaminated ground water, (3) design of the cost-effective treatment system, and (4) extension of a municipal water system to serve residents whose wells would become contaminated within 12 months.

This is the top priority site in New Hampshire.

Status (July 1983): In June 1982, EPA amended the Cooperative Agreement to award an additional $2,064,940 to (1) construct a larger (20-acre) slurry wall than originally planned (completed in December 1972) and (2) conduct pilot studies to develop design specifications for the ground water treatment system. The pilot studies were completed in the second quarter of 1983. The Cooperative Agreement will be amended to provide funds for construction of the treatment system, which is expected to operate for 2 years.

Response category / Cleanup status code, October 1984: R S / O

TINKHAM GARAGE
Londonderry, New Hampshire

Conditions at listing (December 1982): The Tinkham Garage Site covers about 25 acres in Londonderry, New Hampshire. The open and wooded land is bordered by residential and agricultural land. During the 1970s, oil, oily materials, washings from septic tank trucks, and other substances were discharged on the site. In May 1978, the State ordered the site owner to prevent further degradation of surface water and ground water. In November 1981, EPA detected chemicals in ground water at the site. In October 1982, volatile organic chemicals were identified in surface water and ground water in areas adjacent to the site. The State confirmed these results independently.

Status (July 1983): In early 1983, wells of the Londonderry Green Apartment complex and several other private wells closed due to contamination. CERCLA emergency funds ($150,000) were made available to truck in bottled and bulk water. A line to the Town of Derry's municipal well will be constructed as a permanent source of uncontaminated water.

EPA has completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. Now EPA and the State are negotiating a Cooperative Agreement for further cleanup.

Response category / Cleanup status code, October 1984: R S / O

A. O. POLYMER
Sparta Township, New Jersey

Conditions at listing (December 1982): A. O. Polymer manufactured resins on a 4-acre site in Sparta Township, New Jersey. Among the wastes left on-site when operations ceased were 350 leaking and deteriorating drums. Buried drums were crushed or left unsealed prior to burial. In mid-1980, the State removed all solid and buried materials. In October 1980, a waste generator removed 34 drums of liquid wastes. In December 1981, the State removed another 266 drums and completed removal of liquid materials. The site continues to threaten the Allentown Formation, which supplies water for 700 people. The State is undertaking an extensive program to sample ground water.

Status (July 1983): The State is pursuing cleanup through an enforcement action and is conducting additional monitoring and analysis to further define the nature and extent of contamination.

Response category / Cleanup status code, October 1984: D / O

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

AMERICAN CYANAMID CO.
Bound Brook, New Jersey

Conditions at listing (December 1982): American Cyanamid Co. manufactures a wide range of organic compounds on a 575-acre site in Bound Brook, New Jersey. On the site are a number of individual disposal areas, including both active and inactive lagoons and inactive landfills. Ground water beneath the site is contaminated with a wide range of organic compounds. The plant is located on the Raritan River adjacent to surface water intakes for public water supplies.

Status (July 1983): American Cyanamid is pumping a sufficient amount of ground water to prevent migration off-site and is also conducting additional studies of the source of contamination. All activities are part of an Administrative Consent Order the company signed with the State.

Response category / Cleanup status code, October 1984: B

ASBESTOS DUMP
Millington, New Jersey

Conditions at listing (December 1982): The Asbestos Dump covers 12 acres adjacent to the Passaic River in Millington, New Jersey. The Asbestos Hill is the result of years of dumping by several asbestos processing companies. In the 1905s, National Gypsum Co. acquired the site. Before closing the plant in 1975, National Gypsum had the dump covered with soil and seeded. The property was later sold to TIFA, Ltd., a manufacturer of pesticide-distributing equipment. At times, erosion and weathering have exposed small areas of asbestos along the river bank. National Gypsum has an agreement with TIFA and the State to maintain the dump and stabilize the river bank. Recently, allegations have been made that phenylmercuric acetate had been disposed of in the dump.

Status (July 1983): Recently, National Gypsum restabilized the river bank, correcting erosion that took place during heavy spring rains. EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: F

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

BEACHWOOD/BERKLEY WELLS
Berkley Township, New Jersey

Conditions at listing (December 1982): The Beachwood/Berkley Wells involve an area of contaminated ground water in Berkley Township, New Jersey. To date, county health officials have closed 128 residential wells served by the Cohansey Aquifer due to excessive levels of lead. The Cohansey Aquifer is the major source of drinking water for residents in the surrounding area. The source of the contamination is unknown.

Status (July 1983): EPA is planning to prepare a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

BOG CREEK FARM
Howell Township, New Jersey

Conditions at listing (December 1982): The Bog Creek Farm Site in Howell Township, New Jersey, is a 4-acre dump at the rear of a 12-acre farm. The site is adjacent to the North Branch of Squankum Brook. Paint wastes, oils, lacquer thinners, paint solvents, metal paints, paint resins, creosol, and disinfectants were dumped on the site.

Many of these chemicals are leaching into Squankum Brook, which leads to the Manasquan River. The Manasquan is used for fishing, boating, and swimming. Allaire State Park is just downstream. These same chemical contaminate the nearby aquifer. Citizens have frequently complained of odors coming from the site.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

BRICK TOWNSHIP LANDFILL
Brick, New Jersey

Conditions at listing (December 1982): Brick Township Landfill (Old French's Landfill) covers 50 acres in a residential area of Brick, Ocean County, New Jersey. Prior to 1972, the landfill was privately owned and received up to 120,000 gallons of waste, including chemical wastes, per day. Brick Township acquired the site in 1972. Remaining on the site are five liquid-filled lagoons, about 180 empty drums, and an old waste incinerator. Four on-site monitoring wells indicate high concentrations of organic solvents. The source of drinking water for 57,500 area residents is the underlying Cohansey Aquifer. The site is 50 feet from a group of condominiums and across the street from the proposed site for a school.

Status (July 1983): A landfill closure plan is being developed by the township. However, further investigation is necessary to determine the need for and extent of additional remedial action.

Response category / Cleanup status code, October 1984: D

BRIDGEPORT RENTAL & OIL SERVICES
Bridgeport, New Jersey

Conditions at listing (October 1981): Bridgeport Rental & Oil Services (BROS) is a 27.2-acre site in Bridgeport, Gloucester County, New Jersey. It is adjacent to Cedar Swamp, a tidal area. Little Timber Creek, a tributary of the Delaware River, borders the site. The company operated from 1969 until 1980. The site holds more than 80 tanks and process vessels, drums, tank trucks, and an 11.8-acre unlined lagoon. The lagoon contains an estimated 50 million gallons of oil, oil-water emulsions, contaminated water, and sludge. The wastes, which contain heavy metals, PCBs, and other organic compounds, have seeped into the soil and contaminate surface waters and ground water supplying private drinking wells.

In the spring of 1981, $200,000, made available through Section 311 of the Clean Water Act, were used to lower the level of the lagoon, which was overflowing from heavy rains. In September 1981, with $410,000 made available through the Resource Conservation and Recovery Act, EPA started a remedial investigation to determine the extent and type of contamination and to evaluate alternative water supplies for local residents.

Status (July 1983): In the summer of 1982, the lagoon was lowered again, this time with $200,000 in CERCLA emergency funds. Also, a plan for an initial remedial measure was developed to lower the lagoon an additional 8 to 10 feet, treat the aqueous phase, discharge the water to Little Timber Creek, and dispose of the wastes off-site. A Superfund State Contract signed in December 1982 approved $3.3 million for site cleanup, $2.8 million of it to implement the plan. The design phase is scheduled to be completed in the third quarter of 1983. Funds are also provided for a feasibility study to identify alternatives for long-term remedial action at the site. It is scheduled to be completed in the first quarter of 1984.

In June 1982, the Department of Justice, on behalf of EPA, entered into a Consent Decree with the owners and operators of the site under Section 7003 of the Resource Conservation and Recovery Act.

Response category / Cleanup status code, October 1984: R / O

BURNT FLY BOG
Marlboro Township, New Jersey

Conditions at listing (October 1981): Burnt Fly Bog is a semirural area covering approximately 1,700 acres, most of it in Marlboro Township, Monmouth County, New Jersey. Some of the bog also extends into Middlesex County. During the 1950s and early 1960s, as many as seven unlined lagoons on 10 acres within the bog were used for storage, primarily of waste oil. As a result of both intentional and accidental discharges from the lagoons, at least 60 acres of the bog have been contaminated. In addition to the contaminated area, the site consists of: four lagoons — two containing liquid, two containing sludge; an approximately 13,000-cubic-yard mound of sludge; and an undetermined number of exposed and buried drums. The site is a ground water discharge area for the Englishtown Aquifer. Ground water flows to the surface and drains into Deep Run. Ground water, surface water, and air are contaminated by oil and various organic chemicals.

In June 1979, the State filed suit against the owners.

In September 1981, EPA awarded a Cooperative Agreement to New Jersey for $336,305 in grant funds authorized under the Resource Conservation and Recovery Act.

Status (July 1983): Under the Cooperative Agreement, the State completed (1) a field investigation to characterize ground water, (2) a feasibility study for removal of contaminated soil and drums, and (3) a feasibility study for closing the site. Early in 1982, EPA used $35,000 in CERCLA emergency funds to install a 900-foot fence and repair a 6-foot section of dike. EPA and the State are negotiating on two Cooperative Agreements for further cleanup activities.

Response category / Cleanup status code, October 1984: R S / O

CALDWELL TRUCKING CO.
Fairfield, New Jersey

Conditions at listing (December 1982): Caldwell Trucking Co. is an active sewage hauling firm occupying 9 acres in Fairfield, Essex County, New Jersey. For several years up to 1974, the owners hauled industrial waste and discharged it into four unlined lagoons. The sludge in the lagoons contains, among other things, trichloroethylene, chloroform, and lead. About 50 private wells have been closed because of contamination from this site, and another 50 to 100 are threatened. Two public wells have been closed.

The plume of contaminated ground water is moving toward the Passaic River. The point where the plume is predicted to enter the river is about 2 miles upstream of a drinking water intake in the river. In September 1982, the State required Caldwell Trucking to install monitoring wells and to decontaminate the site, including removing contaminated soil and sludge from the lagoons.

Status (July 1983): Conditions at the site are currently being addressed through a State enforcement action against parties responsible for wastes at the site.

Response category / Cleanup status code, October 1984: R S

CHEMICAL CONTROL
Elizabeth, New Jersey

Conditions at listing (October 1981): The Chemical Control Site is in Elizabeth, New Jersey. The Elizabeth River borders the site on the west and Authur Kill is about 200 feet east. The State, through litigation, placed the company in receivership in January 1979, leaving on-site about 65,000 drums of untreated hazardous chemical waste, two buildings used for the storage of chemicals and pesticides, and seven storage tanks containing chemicals. The State worked on cleaning up the site until April 1980, when there was a massive fire. Due to fire, cleanup of the site was accelerated.

Status (July 1983): Cleanup activities continued to November 1981. The site is now a fenced-in gravel lot with about 200 gas cylinders and 11 trailers awaiting disposal, and blocked storm sewers. A U.S. Coast Guard report indicates several metallic objects are in the river adjacent to the site.

EPA plans to conduct additional studies and corrective actions at the site under a Superfund State Contract with New Jersey amounting to about $500,000.

The owner and a waste transporter were found guilty of criminal charges and are in jail.

Response category / Cleanup status code, October 1984: R S / O

CHEMICAL LEAMAN TANK LINES, INC.
Bridgeport, New Jersey

Conditions at listing (September 1983): Chemical Leaman Tank Lines, Inc. (proposed for listing as Chemical Leaman Tank Liners, Inc.) has operated a tank-washing facility (including cleaning the interior and exterior of trailers) since 1960 on a 2-acre site in Bridgeport, New Jersey. The waste water generated was placed in a series of six lagoons and ultimately discharged to Moss Creek. In 1975, sludge in the settling lagoons was excavated and disposed of off-site. They were then filled in. The aeration lagoons were filled in, but no sludge was removed. In 1980-81, the State found carbon tetrachloride and other organics in ground water on the site, as well as in private wells.

The State is currently negotiating with the owner for cleanup of the site.

Status (June 1984): EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: D

CHEMSOL, INC.
Piscataway, New Jersey

Conditions at listing (December 1982): Chemsol, Inc., was a chemical manufacturer in Piscataway, New Jersey. The site is no longer active. The State determined that 40 drums of chemical wastes are buried at the 12-acre site and suspects that more may be buried.

Both surface water and ground water near this site are contaminated with chlorinated solvents (including trichloroethylene, tetrachloroethylene, and carbon tetrachloride) and other toxic organic chemicals. Soils have also been contaminated from leaking drums. Ground water is used primarily for industrial processes, although there are private wells in the area.

Status (July 1983): EPA is considering various alternatives for this site.

Response category / Cleanup status code, October 1984: S

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

CIBA-GEIGY CORP.
Toms River, New Jersey

Conditions at listing (December 1982): Ciba-Geigy Corp. operates the Toms River Chemical Plant on a 1.5-square mile site in Toms River, Ocean County, New Jersey. The plant is engaged in the batch manufacture of a variety of synthetic organic dyes, pigments, and epoxy resins. Waste waters are treated in a 7.5-million-gallon-per-day treatment plant and discharged under a Clean Water Act permit to the Atlantic Ocean. Other wastes generated during the manufacturing process are disposed of in on-site landfills. Within the property boundaries are inactive landfills that received large quantities of chemical wastes over the past years. Of concern is the potential impact these materials may have on both public and private wells in the surrounding area.

This site was once listed under the name "Toms River Chemical."

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

COMBE FILL NORTH LANDFILL
Mount Olive Township, New Jersey

Conditions at listing (December 1982): The Combe Fill North Landfill (formerly the Morris County Landfill) occupies about 102 acres in Mount Olive Township, New Jersey. Between 1966 and 1981, the landfill accepted municipal and industrial (nonchemical) wastes. When the landfill closed, procedures specified by the State were not followed.

Ground water on- and off-site contains numerous organic contaminants, as do residential wells downgradient of the site. Air monitoring on the landfill has also detected several organic contaminants. An incident in which an individual contacted sulfuric acid on the site is also recorded. Because the majority of the population surrounding the landfill relies on private or municipal wells, a potential public health threat exists. Additionally, the site is not fenced or capped, and gases can migrate off-site.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

COMBE FILL SOUTH LANDFILL
Chester Township, New Jersey

Conditions at listing (December 1982): Combe Fill South Landfill covers 80 acres in Chester Township, Morris County, New Jersey. The area near the landfill is drained by the North Branch of the Raritan River and by the Lamington River. Trout Brook, a recreational waterway, runs through the site. The State detected various chlorinated organic compounds in ground water and surface water. There is the potential for contaminating drinking wells that tap the underlying Precambrian Gneiss Aquifer.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

COOPER ROAD
Voorhees Township, New Jersey

Conditions at listing (September 1983): The Cooper Road Site covers 85 acres in Voorhees Township, New Jersey. It is the result of "midnight dumping" by unknown persons. An unknown quantity of vials containing numerous hazardous substances, including hexachlorocyclopentadiene, 1,3-dichlorobenzene, and other solvents, are visible, and many more are probably buried under sand. Several private and municipal wells are within 500 feet of the site. The nearest surface water, North Branch River, empties into the Delaware River. Ground water and surface water have not yet been sampled.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/"Superfund")

CPS/MADISON INDUSTRIES
Old Bridge Township, New Jersey

Conditions at listing (December 1982): The CPS/Madison Industries Site covers 35 acres in Old Bridge Township, Middlesex County, New Jersey. Since 1967, these companies have repeatedly dumped and discharged chemicals into the public sewer system, as well as onto their respective properties. The State estimates that about 400 tons of hazardous wastes have been dumped, including organic chemicals (for example, benzene, carbon tetrachloride, bromoform, 1,1,1-trichloroethane, and methylene chloride) and heavy metals (for example, cadmium and lead). Both surface water and ground water are contaminated.

Through a Middlesex County Superior Court decision (Oct. 15, 1981), the State has begun the process of remedying the surface water and ground water problems associated with this site. The court order directs the two companies to reimburse the State for costs it incurs for site cleanup or containment.

Status (July 1983): The State continues to work on the cleanup.

Response category / Cleanup status code, October 1984: S

D'IMPERIO PROPERTY
Hamilton Township, New Jersey

Conditions at listing (October 1981): The D'Imperio Property is a 1-acre inactive open dump bordered by wooded property in Hamilton Township, Atlantic County, New Jersey. It is within 0.3 miles of a major residential development. Prior to 1976, the site, believed to have been an old borrow pit, was used to bury an unknown quantity of 55-gallon drums; 50 corroded drums are exposed. Ground water in the upper aquifer is contaminated with benzene and chlorinated organic chemicals, including trichloroethylene. The lower aquifer, the Cohansey Aquifer, is a source of drinking water. Because there is potential for the contamination to flow vertically, the lower aquifer could be contaminated.

Status (July 1983): In September 1982, EPA signed a $368,000 Superfund State Contract with New Jersey to fence the site and conduct a feasibility study to identify alternatives for remedial action. The fence is scheduled to be completed in the fourth quarter of 1983 and the study in the first quarter of 1984.

EPA has identified parties potentially responsible for wastes associated with the site and is seeking their cooperation in the cleanup. The owner of the site filed a complaint for declaratory judgment in District Court on April 22, 1983.

Response category / Cleanup status code, October 1984: R

DE REWAL CHEMICAL CO.
Kingwood Township, New Jersey

Conditions at listing (September 1983): De Rewal Chemical Co. is a waste disposal operation that covered 1.4 acres in Kingwood Township, Hunterdon County, New Jersey. From about 1973 to 1976, the company accepted wastes containing chromium and copper. Soil in parts of the site, now a private residence, is contaminated with the two metals, according to analyses conducted by the State. Ground water on-site is also contaminated. Ground water is the source of drinking water for the area. Storm run-off from the site flows into the Delaware River, about 150 feet to the west. The site is located in the floodplain of the river, which is used for recreation.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

DELILAH ROAD
Egg Harbor Township, New Jersey

Conditions at listing (September 1983): The Delilah Road Site covers 40 acres in Egg Harbor Township, Atlantic County, New Jersey. The site, an old sand-mining operation, is filled with municipal wastes, construction wastes, and lead and trichloroethylene sludges.

In 1980, a State case against Lightman Drum Co., Inc., went to trial, and the defendants were found guilty of illegally dumping a truckload of drums of chemical wastes at the site.

In August 1982, EPA discovered that ground water at the site is contaminated with mercury, chromium, lead, and methylene chloride.

Status (June 1984): EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R

DENZER & SCHAFER X-RAY CO.
Bayville, New Jersey

Conditions at listing (December 1982): Denzer & Schafer X-Ray Co. reclaims silver on a 5-acre site in Bayville, Ocean County, New Jersey. Since 1979, the facility has discharged caustic waste water to an on-site septic system. The underlying Cohansey Aquifer is contaminated with toxic and volatile organics. The aquifer supplies drinking water to residential and public water supply wells serving 25,500 area residents. No contamination of surface water or air has been documented to date.

Status (July 1983): EPA plans to prepare a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

DIAMOND ALKALI CO.
Newark, New Jersey

Conditions at listing (September 1983): The Diamond Alkali Co. Site occupies about 1 acre immediately adjacent to the Passaic River, in Newark, Essex County, New Jersey. From 1943 through 1968, the company manufactured numerous chemicals on the site, including 2,4,5-trichlorophenol, which is likely to contain dioxin as an impurity. Extensive sampling conducted by EPA and the State has detected extremely high concentrations of dioxin on and off the site. EPA and the State have covered the area of major contamination with plastic tarpaulins. Adjacent transportation routes and residential areas were swept and vacuumed. Workers may have been exposed to dioxin during normal operations, as well as during renovations conducted during the summer of 1982. Another company has since purchased the land.

The area is both densely populated and heavily industrialized. Municipal water is drawn from the Wanaque Reservoir, roughly 35 miles from the site.

Status (June 1984): On March 13, 1984, the State and Diamond entered into an Administrative Order on Consent for a remedial investigation/feasibility study and for on-site cleanup.

Response category / Cleanup status code, October 1984: V / I

DOVER MUNICIPAL WELL 4
Dover Township, New Jersey

Conditions at listing (December 1982): The Town of Dover Water Commission owns and operates Municipal Well 4 in Dover Township, Morris County, New Jersey. In August 1980, the well was taken out of service because it was contaminated with halogenated organic solvents from an unknown source.

Status (July 1983): No source has thus far been linked to the contamination. The State is actively investigating possible sources and is reviewing a hydrogeological study submitted by a private party. The Dover Water Commission has been authorized to spend $45,000 over a 2-year period to identify possible sources and has engaged a consultant to assist in the work.

Response category / Cleanup status code, October 1984: D

ELLIS PROPERTY
Evesham Township, New Jersey

Conditions at listing (December 1982): The Ellis Property covers 3 acres in Evesham Township, New Jersey. The site, once the scene of drum-cycling operations, consists of: a large two-story building housing several washing tanks and troughs and 50 to 75 drums, many full; three sheds containing various size drums and chemical containers, which are full; and an area adjacent to the sheds containing about 100 55-gallon plastic drums, most of which still contain some acid liquid. Several hundred drums are spread haphazardly around the site. Many spills are obvious.

The site is surrounded by cultivated fields. An intermittent stream named Sharps Run is less than 0.3 miles to the south. Ground water and surface water are suspected of being contaminated with acids. The Englishtown Aquifer directly underlies the site, with the Magothy and Raritan Formation at about 320 feet below. Ground water in the vicinity supplies drinking water for 900 homes and water for irrigation of farmland.

Status (July 1983): The State has removed all drums from the site and neutralized soils in the area with lime. EPA is awaiting documentation from the State regarding the cleanup.

Response category / Cleanup status code, October 1984: R / O

EVOR PHILLIPS LEASING
Old Bridge Township, New Jersey

Conditions at listing (December 1982): The Evor Phillips Leasing Site covers 6 acres in Old Bridge Township, New Jersey. A State investigation conducted in May 1982 found that drums containing explosive chemicals had been buried at the site. Both surface water and ground water are threatened.

Status (July 1983): The State excavated 30 to 40 drums; 4,000 to 5,000 drums remain buried. In May 1983, the State met with the current site owner to discuss ways in which to remedy the problem.

EPA plans to prepare a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

EWAN PROPERTY
Shamong Township, New Jersey

Conditions at listing (September 1983): The Ewan Property is a 43-acre, privately-owned property located in Shamong Township, Burlington County, New Jersey. An estimated 400 to 500 drums of hazardous waste containing various solvents, heavy metals, and polynuclear aromatic hydrocarbons have been buried on an approximately 4-acre section of the property. The State has detected those chemicals in the aquifer currently supplying drinking water to about 1,000 area residents. Single-family residences are located as close as 2,000 feet away.

Status (June 1984): EPA is conducting a search for parties potentially responsible for wastes associated with the site.

Response category / Cleanup status code, October 1984: D

tional Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

FAIR LAWN WELL FIELD
Fair Lawn, New Jersey

Conditions at listing (December 1982): Fair Lawn, New Jersey, operates three well fields to supply water to its 32,000 residents. The wells in the Westmoreland Field are the most heavily contaminated. Lower levels have also been detected in wells in the Memorial and Cadmus Fields. Chloroform, carbon tetrachloride, and tetrachloroethylene are among the major contaminants. None of the levels has been high enough to force closing of the wells.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: S / I

FLORENCE LAND RECONTOURING, INC., LANDFILL
Florence Township, New Jersey

Conditions at listing (September 1983): The Florence Land Recontouring, Inc., Landfill covers 39 acres in Florence Township, Burlington County, New Jersey. It was licensed by the State as a municipal waste landfill. In 1981, it ceased operations in response to a 1980 Administrative Order issued by the State denying an application to expand and requiring it to close.

On-site wells are contaminated with hazardous substances, including toluene, according to analyses conducted by the State. The landfill has a history of water-ponding problems. In 1979, the State issued a final Consent Order requiring that the owner rehabilitate the dikes, cover, and leachate collection system. The operator has been unable to meet the requirements of the order, and standing water is routinely found on the site.

The area, largely rural/agricultural, is highly dependent on ground water for drinking water — 16 public wells and over 1,800 private wells are within 3 miles of the landfill. Development of a 1,500-home complex is proposed within 0.5 miles of the site.

Status (June 1984): EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R

FRIEDMAN PROPERTY
Upper Freehold Township, New Jersey

Conditions at listing (October 1981): The Friedman Property is located in Upper Freehold Township, Monmouth County, New Jersey. The 3-acre site lies just across the boundary from Plumstead Township, and is immediately adjacent to an unnamed tributary to Lahaway Creek, which is itself a tributary of the Delaware River. In the late 1950s and early 1960s, drums and free-flowing liquids were dumped into a natural ditch and then covered over. Several residences and two trailer parks within 0.3 miles of the site have private wells. Four monitoring wells installed in 1980 by New Jersey detected heavy metals and a number of organic pollutants.

The Friedman Property, Goose Farm, Pijak Farm, and Spence Farm (the so-called "Plumstead Sites") are within a 2-mile radius. The Friedman Property was once listed under the name "Upper Freehold Site."

Status (July 1983): In September 1982, EPA awarded a $270,000 Cooperative Agreement to New Jersey for a feasibility study to identify alternatives for remedial action at the site. It is scheduled to be completed in the third quarter of 1984.

Response category / Cleanup status code, October 1984: R

GEMS LANDFILL
Gloucester Township, New Jersey

Conditions at listing (July 1982): The Gloucester Environmental Management Services (GEMS) Landfill covers 60 acres in Gloucester Township, Camden County, New Jersey. The landfill is now closed. The land is owned by the township and was leased to GEMS. Although the site is zoned for industrial purposes, the surrounding land is principally residential.

Organic solvents and other industrial chemicals were dumped into pits at the landfill between 1970 and 1974. These chemicals are presently contaminating ground water, surface water and air. About 38,000 people live within 3 miles of the site; many depend on private wells. Leachate from the site is also contaminating Holly Run Stream and Briar Lake.

Status (July 1963): In February 1983, using $270,000 in CERCLA emergency funds, EPA removed debris from the site, constructed a fence, and took other measures to prevent the wastes from coming in contact with residents in the area. In the summer of 1983, EPA plans to start a $125,000 remedial investigation to determine the type and extent of contamination at the site.

Response category / Cleanup status code, October 1984: R / I

GOOSE FARM
Plumstead Township, New Jersey

Conditions at listing (October 1981): Goose Farm is a 1.5-acre site in a rural area of Plumstead Township, Ocean County, New Jersey. In the late 1960s and early 1970s, drums and free-flowing liquids were dumped into an excavation, which was later covered with soil. PCBs and other toxic organic chemicals have been detected in air, ground water, and surface water. With the State as the lead agency, emergency removal actions began at the site in late 1980.

Goose Farm, the Friedman Property, Pijack Farm, and Spence Farm (the so-called "Plumstead Sites") are within a 2-mile radius.

Status (July 1983): The emergency actions ended in February 1982. They included excavation and disposal off-site of more than 4,800 containers, 3,000 cubic yards of highly contaminated soil, and over 9,000 gallons of bulked liquid wastes. A system was installed to treat 7.7 million gallons of ground water. Site cleanup was funded initially under Section 311 of the Clean Water Act and the New Jersey Spill Compensation Fund. Later, CERCLA emergency funds were used. By late 1981, the State had spent $4 million on the site and EPA $2.4 million. Ground water in and near the site continues to be contaminated with significant levels of organic compounds and heavy metals.

In September 1982, EPA awarded a $189,000 Cooperative Agreement to New Jersey for a feasibility study to identify alternatives for remedial action at the site. It is scheduled to be completed in the third quarter of 1984.

Response category / Cleanup status code, October 1984: R F / O

HELEN KRAMER LANDFILL
Mantua Township, New Jersey

Conditions at listing (July 1982): Helen Kramer Landfill covers 60 acres in Mantua Township, Gloucester County, New Jersey. The privately-owned landfill operated from 1970 until the State closed it in 1980 because of permit violations. During this time, the landfill received municipal waste, municipal construction debris, and nonchemical industrial waste. Chlorinated organics and heavy metals have been identified in ground water and surface water downgradient of the landfill. The ground water provides drinking water, while the surface water downstream is used for irrigation. An underground fire at the site in 1981 burned for about 2 months, emitting noxious fumes to surrounding areas. Airborne contaminants were detected during and after the fire.

Status (July 1983): In the fall of 1983, EPA plans to start a $350,000 remedial investigation to determine the type and extent of contamination at the site.

Response category / Cleanup status code, October 1984: R

HERCULES, INC. (GIBBSTOWN PLANT)
Gibbstown, New Jersey

Conditions at listing (December 1982): Hercules, Inc., owns a 5.5-acre site in undeveloped land in Gibbstown, Gloucester County, New Jersey. On the property and adjacent to the Delaware River are two unlined, open disposal pits in which Hercules and the previous owner of the site disposed of industrial chemicals, solvents, acids, and waste oils. Ground water is contaminated with benzene.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

HOPKINS FARM
Plumstead Township, New Jersey

Conditions at listing (September 1983): The Hopkins Site covers 57 acres in Plumstead Township, New Jersey. It is one of seven "Plumstead" sites in Ocean and Monmouth Counties, of which four were placed on the National Priorities List in September 1983. All sites are within about a 20-square-mile rural farming area. The site was used for disposal of an unknown number of drums, and there is evidence that bulk liquids were dumped. The State detected heavy metals and other hazardous chemicals in concentrations above drinking water standards in two of the six monitoring wells on-site. Also, State inspectors noted chemical odors on-site.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

IMPERIAL OIL CO., INC./CHAMPION CHEMICALS
Morganville, New Jersey

Conditions at listing (December 1982): The Imperial Oil Co., Inc./Champion Chemicals Site covers 5 acres in Morganville, Monmouth County, New Jersey. Imperial blends oil on the site, which is leased from Champion Chemicals. Several companies have operated at the site in the past. One, a reprocessor of waste oil, may have discharged wastes to a nearby stream. A waste pile on the premises is contaminated with PCBs. PCBs, petroleum hydrocarbons, and heavy metals contaminate soil surrounding both the waste pile and an oil/water separator, sediments in the stream nearby, and ground water beneath the site.

This site was once listed under the name "Imperial Oil Co."

Status (July 1983): The State is reviewing a preliminary assessment prepared by the present owner. In the summer of 1983, EPA plans to start preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

JACKSON TOWNSHIP LANDFILL
Jackson Township, New Jersey

Conditions at listing (December 1982): Jackson Township owned and operated a 12-acre landfill in a semirural area within its boundaries in Ocean County, New Jersey. The township obtained the site, originally a mining pit, from a local mining company in the early 1970s and filled it from 1972 until it closed in 1980. In addition to accepting refuse and sewage for which it had a State permit, the landfill received liquid hazardous waste. As a result, the underlying Cohansey Aquifer, which supplies water to area residents, has been contaminated with various organic chemicals. Local officials condemned over 40 residential wells, and the State provides funding for an alternate water supply.

Status (July 1983): The State is pursuing cleanup through an enforcement action.

Response category / Cleanup status code, October 1984: D

JIS LANDFILL
Jamesburg/South Brunswick Township, New Jersey

Conditions at listing (December 1982): Jones Industrial Service (JIS) operated a landfill in an agricultural area of Jamesburg/South Brunswick Township, Middlesex County, New Jersey. The landfill, originally a borrow pit, received liquid chemical wastes from the 1960s until the State closed it in 1980. Investigations indicate that numerous drums of solvents may also have been buried at the site. Volatile organics have contaminated the Old Bridge Aquifer, and the contaminated ground water plume has migrated off-site. One residential well has been closed, and others are threatened.

Status (July 1983): The State has an ongoing judicial action aimed at requiring the owner/operator to properly cap the site and decontaminate the ground water.

Response category / Cleanup status code, October 1984: S

KIN-BUC LANDFILL
Edison Township, New Jersey

Conditions at listing (October 1981): Kin-Buc Landfill covers 20 acres in Edison Township, Middlesex County, New Jersey. It accepted 70 million gallons of various industrial wastes from about 1971 through 1976, when the State revoked its permit. Oil heavily laden with PCBs accumulates in a natural depression called "Pool C" adjacent to the landfill and then discharges into Edmund's Creek, a tributary of the Raritan River. The pond also holds aqueous leachate that contains chlorinated organic compounds and is believed to be coming from the landfill. Ground water is contaminated. As a result of Federal enforcement action, the owner capped the fill with a clay/synthetic cover.

In February 1980, EPA started to collect leachate in Pool C with funds provided initially under Section 311 of the Clean Water Act and later under CERCLA.

Status (July 1983): A Superfund State Contract signed with New Jersey in July 1982 approved about $3 million to (1) design, construct, and operate an interim collection/treatment system, (2) dispose off-site of the drums of wastes collected and stored on-site, and (3) prepare a feasibility study to identify alternatives for long-term remedial action. In September 1982, the owner took over operation of the Pool C collection system from EPA.

The Department of Justice, on behalf of EPA, is continuing a Federal civil action seeking injunctive relief against parties potentially responsible for wastes associated with the site.

Response category / Cleanup status code, October 1984: V R F / O

KING OF PRUSSIA
Winslow Township, New Jersey

Conditions at listing (December 1982): The King of Prussia Site consists of a 7-acre abandoned chemical waste treatment facility in Winslow Township in the Pine Barrens area of southern New Jersey. The facility closed in 1975. Six lagoons on the site contain chemical wastes. Records indicate that more than 40,000 drum equivalents of waste water containing toxic chemicals were delivered to the site.

A number of homes within 3 miles of the site, as well as a local industry, have drinking water wells. Arsenic, heavy metals, vinyl chloride, phthalate esters, chloroform, and trichloroethylene have been detected in ground water nearby, and copper, zinc, trichloroethylene, and 1,1,2,2-tetrachloroethane in Great Egg Harbor River.

Status (July 1983): EPA is considering various alternatives for this site.

Response category / Cleanup status code, October 1984: D

KRYSOWATY FARM
Hillsborough, New Jersey

Conditions at listing (July 1982): The Krysowaty Farm is located in Hillsborough, Somerset County, New Jersey. The south branch of the Raritan River is 0.3 miles from the site. Between 1965 and 1970, various chemicals, including paint and dye wastes, were disposed of in 5 acres along a ravine at one end of the 42-acre farm. In late 1980, a witness to the dumping came forward after the farm owner died. Eyewitness accounts estimate that 500 drums of waste were dumped in the ravine, along with unknown volumes of waste solvents and sludge. In July 1981, the township and the State excavated 20 to 30 drums at the site. Studies indicate that both ground water and surface water are contaminated with volatile organic compounds. The closest residences, about 900 feet from the disposal area, depend on private wells for drinking water.

Status (July 1983): In December 1982, EPA signed a $300,000 Superfund State Contract with New Jersey for a remedial investigation to determine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the fourth quarter of 1983.

Response category / Cleanup status code, October 1984: R

LANDFILL & DEVELOPMENT CO.
Mount Holly, New Jersey

Conditions at listing (September 1983): Landfill & Development Co. operates a 210-acre landfill in Mount Holly, New Jersey. It is adjacent to Rancocas Creek and surrounded by residential developments. The site, originally a sand and gravel pit, accepts municipal refuse, industrial and commercial solid waste, and treated sewage sludge. It may have accepted hazardous substances in the past. The local health department has documented that monitoring wells and some private wells are contaminated with volatile organic chemicals.

In September 1977, the State issued an Administrative Order requiring the company to replace the private wells, install a liner at the landfill, and pump and treat contaminated ground water. The pumping, which is currently underway, involves 15 wells downgradient of the landfill. The water from these wells is aerated and sprayed over a 5-acre wooded area on the site.

Status (June 1984): The State is involved in an administrative hearing process to force the facility to obtain a new and revised registration.

Response category / Cleanup status code, October 1984: S / I

LANG PROPERTY
Pemberton Township, New Jersey

Conditions at listing (December 1982): The Lang Property is a 10-acre dump site in Pemberton Township, Burlington County, New Jersey, just north of Lebanon State Forest. The site is within the Pine Barrens in an area of blueberry and cranberry farms. About 1,500 drums of wastes were emptied onto the ground at the site. Localized contamination of ground water and surface water by various chemicals, including phenols, heavy metals, and trichloroethylene, has been documented. The primary concern is contamination of the Cohansey Aquifer, which supplies drinking water to Pemberton Township's 13,000 residents. As many as 20 private wells are within 1 mile of this site. In addition, a back-up well for the Pemberton system is within 3 miles.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further action at the site.

In June 1983, the State collected additional ground water samples.

Response category / Cleanup status code, October 1984: D

LIPARI LANDFILL
Pitman, New Jersey

Conditions at listing (October 1981): The Lipari Landfill is an inactive landfill occupying a 6-acre former gravel pit in Pitman, New Jersey. The site is in an area of fruit orchards. From 1958 to 1971, domestic and industrial wastes, including various toxic organic compounds and heavy metals, were dumped at the site. They percolated into the ground water under the landfill and leached into Chestnut Branch, Rabbit Run, and Alcyon Lake.

In the fall of 1981, EPA completed a remedial investigation and feasibility study of the site.

Status (July 1983): Between 1980 and 1982, using $726,000 made available under Section 311 of the Clean Water Act, EPA's Office of Research and Development, and the Resource Conservation and Recovery Act, EPA studied leachate distribution, drilled and sampled 16 wells, and evaluated various cleanup alternatives. In 1982, using $125,000 in CERCLA emergency funds, EPA installed over 2,000 feet of security fencing around the site. An additional 1,600 feet must still be installed.

In September 1982, EPA signed a $1,689,150 Superfund State Contract with New Jersey to complete design of the remedial alternative selected in the feasibility study and undertake the construction activities. The work is being supervised by the U.S. Army Corp of Engineers. Construction is scheduled to start in the third quarter of 1983.

The remedial action is divided into two phases. The first phase calls for (1) an underground slurry wall encircling a 16-acre area to prevent ground water from leaving or entering and (2) a bentonite clay cap. The second phase evaluates the need to collect ground water from within the enclosure and transport it to a nearby public sewage treatment plant. A decision on the second phase will be made after completion of a study on the compatibility of the ground water to be treated with the collection and treatment system of the sewage plant.

In July 1982, the Department of Justice, on behalf of EPA, entered into a Consent Decree with the owner under Section 7003 of the Resource Conservation and Recovery Act.

Response category / Cleanup status code, October 1984: R F / O

LONE PINE LANDFILL
Freehold Township, New Jersey

Conditions at listing (October 1981): Lone Pine Landfill in Freehold Township, Monmouth County, New Jersey, operated from 1959 to 1979, when it closed by the State. Leachate from the 80-acre site flows into the Manasquan River. Allegedly, 50,000 drums of chemical wastes, as well as free-flowing liquid wastes, were dumped at the site. Excavation of limited areas of the landfill in September 1981 confirmed the presence of drums. A number contain organic chemicals. Benzene, toluene, vinyl chloride, lead, and zinc have been detected in leachate on the site. Downstream, the river has lower levels of the same chemicals. Monitoring wells have found a variety of organic compounds in both the Vincentown Aquifer and the deeper Red Bank Aquifer.

Status (July 1983): In July 1982, EPA signed a $330,000 Superfund State Contract with New Jersey for a feasibility study to identify alternatives for remedial action at the site. A draft was released in June 1983.

The former general manager of the landfill and a transporter pleaded guilty to charges stemming from the illegal disposal of drummed waste in the landfill. In addition, three corporate officers of Scientific Chemical Processing were convicted in Federal District Court of mail fraud charges also related to the illegal disposal activity.

Response category / Cleanup status code, October 1984: R

M & T DELISA LANDFILL
Asbury Park, New Jersey

Conditions at listing (December 1982): The M & T Delisa Landfill operated on a 132-acre site in Asbury Park, New Jersey, from about 1945 to 1975. It reportedly received only municipal waste. In 1976, the Seaview Square Mall was constructed on 25 to 30 acres. Although the mall itself is situated on clean fill, the parking lot is built on garbage. Methane gas vents are located around the parking lot, and a leachate collection system runs underneath it. EPA inspectors have frequently observed leachate streams and seepages discharging into a nearby stream which empties into Deal Lake less than 1 mile away. This fresh water lake is occasionally used for recreational fishing. In June 1981, EPA found that ground water, surface water, and soil are contaminated by polynuclear aromatic hydrocarbons and metals. Private water wells surround the site and may be threatened.

Status (July 1983): In May 1983, the mall and surrounding outside areas were tested for methane gas migration. The results indicate a plume of methane exists about 1 to 3 feet below the ground, outside the mall. The mall owners are installing about four vents in the area of known methane migration.

EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: V R

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MANNHEIM AVENUE DUMP
Galloway Township, New Jersey

Conditions at listing (December 1982): The Mannheim Avenue Dump is located in Galloway Township, Atlantic County, New Jersey. The 2-acre site is owned by Galloway Township and was used to dispose of about 300 drums (11,400 pounds) of degreasing sludge during the 1960s and possibly into the early 1970s. The waste was deposited in a 15-foot deep pit. The Cohansey Aquifer underlies the site at 20 to 30 feet below the surface. It provides drinking water to about 1,300 area residents. The nearest home is 0.1 miles southwest of the site.

Status (July 1983): EPA is planning to start a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further action at the site.

Response category / Cleanup status code, October 1984: D

MAYWOOD CHEMICAL CO.
Maywood/Rochelle Park, New Jersey

Conditions at listing (December 1982): The Maywood Chemical Co. Site consists of three areas in Maywood and Rochelle Park, New Jersey. Starting in the early 1920s, Maywood Chemical processed radioactive thorium for, among other things, the production of mantles in gas lanterns. The process resulted in thorium waste that, while known to be radioactive, was not considered particularly dangerous at that time. The material was used as a fill in three areas now used for residential and commercial purposes. Testing by the Nuclear Regulatory Commission (NRC) and the State indicates that some areas show radiation levels above background. Radon gas is present at levels significantly higher than background in a home built in the residential neighborhood.

Status (July 1983): An EPA investigation is underway to determine the extent of contamination at areas not addressed previously by the State or NRC. EPA is also preparing a remedial plan which will assess all existing information and guide further actions at the site.

Response category / Cleanup status code, October 1984: / I

METALTEC/AEROSYSTEMS
Franklin Borough, New Jersey

Conditions at listing (December 1982): The Metaltec/Aerosystems Site covers 0.5 acres in Franklin Borough, Sussex County, New Jersey. The company buried hazardous wastes, including lead, in a pond on the plant site, which is within 500 feet of a municipal back-up for Franklin Borough.

Status (July 1983): In 1981, the State sent the company an Administrative Order to update a hydrogeologic investigation and evaluate remedial alternatives.

Response category / Cleanup status code, October 1984: R

MONROE TOWNSHIP LANDFILL
Monroe Township, New Jersey

Conditions at listing (December 1982): The Monroe Township Landfill covers 86 acres in Monroe Township, Middlesex County, New Jersey. The landfill operated from 1955 to June 1978, when the State closed it because a colored leachate was seeping from the site. The seepage forced the abandonment of a nearby housing construction project. Hydrochloric acid is known to have been disposed of at the site. In 1979, the State obtained a court order against the landfill owners to correct the seepage. A 900-foot cut-off wall and leachate collection system, which recycled leachate to the landfill, were installed as an interim measure in 1980.

Status (July 1983): A site closure plan is nearing completion. It includes the installation of a 7,000-foot leachate cut-off wall around the perimeter of the landfill, leachate collectors, and intercepting sewers to convey leachate to the Middlesex County Sewage Authority's Old Bridge Sewage Treatment Plant.

Response category / cleanup status code, October 1984: S / O

MONTGOMERY TOWNSHIP HOUSING DEVELOPMENT
Montgomery Township, New Jersey

Conditions at listing (December 1982): The Montgomery Township Housing Development Site is in Montgomery Township, Somerset County, New Jersey. About 13 households in the development used private wells that became contaminated with organic chemicals, including trichloroethylene. Residents now use municipal water. The State has not been able to identify the source of contamination.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

The State continues to collect ground water samples at the site to locate the plume of contamination.

Response category / Cleanup status code, October 1984: R

MYERS PROPERTY
Franklin Township, New Jersey

Conditions at listing (December 1982): The Myers Property covers 2 to 3 acres in a rural area in Franklin Township, Hunterdon County, New Jersey. The site, currently an auto repair shop, previously contained various commercial facilities that produced pesticides. Several drums and asbestos materials are stored in buildings on the site. One well on the property supplies drinking water. The State recommended that it be closed because it is contaminated by various volatile organic chemicals. The site borders Cakepoulin Creek. A spring surfaces on the property and flows into the creek toward a State wildlife refuge.

Status (July 1983): The State has proposed removing the drums stored on-site and is negotiating a Cooperative Agreement with EPA for the surface cleanup.

Response category / Cleanup status code, October 1984: R / I

MASCOLITE CORP.
Millville, New Jersey

Conditions at listing (September 1983): Mascolite Corp. operated an acrylic sheet manufacturing plant on 15.5 acres in Millville, Cumberland County, New Jersey, from 1953 to 1980, when it closed in response to an Administrative Order issued by the State. The order required Mascolite to stop discharging waste water into a nearby ditch, install monitoring wells, and draw up a plan for disposal of waste water in the future and removal of all waste water and sludges on the site. In September 1981, Mascolite entered into an Administrative Consent Order with the State. The order repeated the requirements of the previous Administrative Order and added a provision for removal of contaminated soil. The company, which still owns the site, has not complied fully with the two orders.

Solvents stored in drums and both above- and below-ground tanks have caused extensive contamination of ground water, according to analyses done by the State. The area is highly dependent on ground water for drinking supplies.

Status (June 1984): EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: V R

NL INDUSTRIES
Pedricktown, New Jersey

Conditions at listing (December 1982): The NL Industries landfill covers 14 acres in a rural area in Pedricktown, Salem County, New Jersey. The company recovers lead from spent automotive batteries and separates the plastic from the rubber casings. After the rubber and plastic are separated, the plastic is reprocessed and the rubber is placed in the landfill, which is lined but not capped.

As a result of improper storage of batteries on the site and other factors relating to their processing, ground water, surface water, and soils are extensively contaminated with various heavy metals. Also on-site is a marsh area (which is heavily contaminated with lead) and Oldman Creek, a tributary to the Delaware River.

Status (July 1983): The State is pursuing cleanup through enforcement action.

Response category / Cleanup status code, October 1984: S / O

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) ("Superfund")

PEPE FIELD
Boonton, New Jersey

Conditions at listing (December 1982): Pepe Field is a 3.5-acre municipal athletic field in a residential area of Boonton, Morris County, New Jersey. The site, formerly a swamp, is suspected of having been a hazardous waste dump. The nearby Rockaway River, which receives subsurface drainage from the site, empties into the Boonton Reservoir, the source of Jersey City's water. Hazardous substances have been detected in a below-ground drain that releases directly into the Rockaway River. Hydrogen sulfide and other chemical odors are noticeable.

Status (July 1983): The Town of Boonton is treating the odor problem at Pepe Field with hydrogen peroxide, but with limited success. EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

ational Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

PIJAK FARM
Plumstead Township, New Jersey

Conditions at listing (October 1981): The Pijak Farm Site occupies 5 acres in Plumstead Township, Ocean County, New Jersey. The site, a working farm, is flat, dropping off into a marshy, wooded floodplain. A corn field and two unnamed tributaries to Crosswicks Creek border the site. Between 1963 and 1970, drums and free-flowing liquids were dumped into a natural ditch and then covered over. In 1980, the State found that ground water was contaminated by organic chemicals. Initial analyses of the nearest private wells showed no contamination.

The Pijak Farm, Friedman Property, Goose Farm, and Spence Farm (the so-called "Plumstead Sites") are within a 2-mile radius.

Status (July 1983): In September 1982, a $292,500 Cooperative Agreement was awarded to New Jersey for a feasibility study to identify alternatives for remedial action at the site. It is scheduled to be completed in the third quarter of 1984.

Response category / Cleanup status code, October 1984: R

PRICE LANDFILL
Pleasantville, New Jersey

Conditions at listing (October 1981): Price Landfill is a 26-acre inactive landfill located in Pleasantville, New Jersey. While in operation (1969 - 1976), it accepted industrial wastes containing benzene, chloroform, and trichloroethylene, septic tank and sewer wastes, sludge, grease, and oil. Some liquid wastes were poured directly into the landfill, while others were buried in 55-gallon drums. Leachate is noticeable at various locations on the site, as well as chemical odors and organic vapors. Because their wells are contaminated, residents of about 35 homes now use bottled water. The well field supplying drinking water to Atlantic City, 1 mile downgradient of the site, is threatened by the plume of contaminated ground water.

This is the top priority site in New Jersey.

Status (July 1983): EPA started a number of activities at the site in 1982. During the summer, measures were taken to provide emergency back-up water supplies for Atlantic City. The measures involved arranging for new sources and treating existing sources to ensure their quality. EPA has completed a feasibility study and is developing a long-term remedial action plan. The study involved (1) evaluating alternatives (including carbon treatment) to protect Atlantic City's water supply, (2) containing or eliminating additional migration of contaminants from Price Landfill, and (3) dealing with contamination that has already migrated from the landfill. EPA has approved about $940,000 for the work, under a Cooperative Agreement and a Superfund State Contract.

The Department of Justice, on behalf of EPA, has brought a Federal civil action seeking injunctive relief against the past and present owner, as well as 36 companies and individuals alleged to have generated and transported waste to the landfill. The district court denied EPA's request for injunctive relief. The decision was appealed, and the case was ordered to the district court for trial. Several motions are now pending, and the Government is awaiting opportunity for discovery.

Response category / Cleanup status code, October 1984: R F / O

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

PJP LANDFILL
Jersey City, New Jersey

Conditions at listing (December 1982): The PJP Landfill covers about 50 acres near the Hackensack River in Jersey City, New Jersey. Much of the dump, now closed, is uncovered, and fires frequently flare up on the surface and underground. Volatile organics and other toxic substances have been detected in air, ground water, and run-off. Ground water is used by local industries. Surface waters in the area are used for commercial shipping and recreation. The property is adjacent to heavily populated residential areas.

Status (July 1983): The State is negotiating with the current owners of the site to undertake a study to define the nature and extent of contamination at the site.

Response category / Cleanup status code, October 1984: 5 / 1

RADIATION TECHNOLOGY, INC.
Rockaway Township, New Jersey

Conditions at listing (September 1983): Radiation Technology, Inc., manufactures plastics on a 15-acre site close to Lake Denmark in Rockaway Township, Morris County, New Jersey. The area is totally dependent upon ground water for drinking supplies. Analyses by the State indicate that ground water is contaminated by plasticizers and chlorinated solvents, which were released through dumping of wastes or burial of drums. These pollutants also pose a threat to nearby streams and Lake Denmark.

Two on-site wells were condemned by the local health department in March 1981, and the State issued directives of various types in 1981 instructing the company to remedy the situation. When the company did not comply, the State filed a Verified Complaint and Order to Show Cause in March 1982. On July 7, 1983, the State issued a Consent Order requiring the company to monitor ground water to determine the source of contamination.

Status (June 1984): The monitoring program continues.

Response category / Cleanup status code, October 1984: V

REICH FARMS
Pleasant Plains, New Jersey

Conditions at listing (December 1982): The Reich Farms Site covers 5 acres in the Pleasant Plains section of Dover Township, Ocean County, New Jersey, about 3 miles north of Toms River. As a result of improper storage and disposal of various hazardous substances — including organic solvents, still bottoms, and residual chemicals in 55-gallon drums — on the surface and buried, soil and ground water are contaminated with toxic and volatile organics. The area is rural with suburban developments. Its sits above the Cohansey Aquifer, a major source of drinking water for 61,000 people in Dover Township and the surrounding area.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

RENORA INC.
Edison Township, New Jersey

Conditions at listing (December 1982): Renora, Inc., a hazardous waste collector/hauler, operated from a 5-acre site in Edison Township, Middlesex County, New Jersey, until the State revoked its permit in November 1980. The site is bordered by Mill Creek, Conrail Railroad Tracks, New Jersey Turnpike, and South Main Street. About 1,300 drums and 21 containers on-site contain solvents, resins, and oils. Because of leaking drums and tank trucks, Mill Creek has been contaminated from site run-off. Access to the site is controlled by a fence on three sides and parked trucks on the fourth.

Status (July 1983): The State has re-established an earthen berm along Mill Creek to prevent further contamination from site run-off.

Response category / Cleanup status code, October 1984: D

RINGWOOD MINES/LANDFILL
Ringwood Borough, New Jersey

Conditions at listing (December 1982): The Ringwood Mines/Landfill Site in Ringwood Borough, Passaic County, New Jersey, is about 0.5 miles wide and 2 miles long. It consists of a series of abandoned mine shafts and pits, inactive landfills, and open dumps. Cannon Mine and Peter's Mine have been filled with garbage over the years. Peter's Mine also contains paint sludges, solvents, and scrap metal. Several drums have been observed in the Cannon Mine. Soil, surface water, and ground water may be contaminated.

Ringwood gets drinking water from Wanaque Reservoir, which is supplied by neighboring streams, two originating in the immediate vicinity of the mines; 10 wells are within 2 miles of the site, and one spring is less than 0.5 miles from the site.

Status (July 1983): In late summer of 1983, EPA is planning to undertake a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: V

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

ROCKAWAY BOROUGH WELL FIELD
Rockaway Township, New Jersey

Conditions at listing (December 1982): The Rockaway Borough Well Field is in Rockaway Township, Morris County, New Jersey. Three wells in the field are contaminated with volatile organics, including trichloroethylene and tetrachloroethylene, from an unknown source. The aquifer the wells tap is the sole source of drinking water for 10,000 people. The contaminated wells are close to the Rockaway River. In February 1981, Rockaway Borough installed carbon filtration systems at the three contaminated wells at a cost of $700,000.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

ROCKAWAY TOWNSHIP WELLS
Rockaway, New Jersey

Conditions at listing (December 1982): The Rockaway Township Wells Site is in Rockaway, Morris County, New Jersey. Three wells are contaminated with various volatile organic chemicals. Several sources of contamination are suspected, but only one has been confirmed. The Rockaway Township well system services about 12,000 people.

Status (July 1983): Rockaway Township currently treats the contaminated wells. Shell Oil, identified as a source of ether contamination, installed an aeration system to remove ether from the water, and the township installed an activated carbon system to remove other volatile organics.

Response category / Cleanup status code, October 1984: V / I

ROCKY HILL MUNICIPAL WELL
Rocky Hill Borough, New Jersey

Conditions at listing (December 1982): The Rocky Hill Municipal Well in Rocky Hill Borough, Somerset County, New Jersey, has been contaminated with various volatile organics from an unknown source. The well, which serves about 1,000 residents of the borough, has been sealed, and Elizabethtown Water Co., 9 miles from the site, is providing water.

Status (July 1983): The Town of Rocky Hill is installing an aeration system to remove contaminants from the well.

Response category / Cleanup status code, October 1984: R

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

ROEBLING STEEL CO.
Florence, New Jersey

Conditions at listing (December 1982): Roebling Steel Co. produced steel on a site adjacent to the Delaware River in Florence, New Jersey. Two unlined lagoons are on the site, and there is evidence of dumping and spillage. The lagoons, estimated to be 3 feet deep, contain heavy metals. Drums may also have been buried at the site. Run-off may have contaminated the river. The water table in the area is only about 10 feet below the surface. Homes in Roebling and much of the surrounding area rely on ground water for their drinking water.

Status (July 1983): EPA is considering various alternatives for this site.

Response category / Cleanup status code, October 1984: R

SAYREVILLE LANDFILL
Sayreville, New Jersey

Conditions at listing (December 1982): The Sayreville Landfill covers 30 acres in a moderately industrialized section of Sayreville, New Jersey. Part of this site is in a wetland adjacent to the South River. The town owned and operated the site as a municipal landfill. The State excavated 30 drums from the site and found that they contained para-ethyl toluene and pentachlorophenol. As many as 500 drums containing similar chemicals may be buried on-site. Wastes from this site have contaminated surface water and ground water. The Sayreville and Perth Amboy well fields, which serve about 65,000 people, are within 3 miles of the site. Perth Amboy has had to discontinue using some of its wells. Sayreville, however, has not yet detected any contamination in its well.

Status (July 1983): The State has included this site on its 4-year plan for cleanup of hazardous waste sites.

Response category / Cleanup status code, October 1984: D

SCIENTIFIC CHEMICAL PROCESSING, INC.
Carlstadt, New Jersey

Conditions at listing (December 1982): Scientific Chemical Processing, Inc., recovered and recycled various chemical wastes on a 13.5-acre site in Carlstadt, Bergen County, New Jersey. As a result of a State order, the company ceased operations in 1980. About 375,000 gallons of hazardous substances are stored on the site in tanks, drums, and tank trailers. Soil are extensively contaminated, probably from spillage. Ground water contamination is likely. Run-off from the site is contaminated. The site is located within a coastal wetlands management area, bordered on the northeast by Peach Island Creek, a tidal waterway. Local surface water is used for recreation and industrial water supplies.

Status (July 1983): In 1983 three corporate officers of Scientific Chemical Processing were convicted in Federal District Court of mail fraud charges resulting from the improper disposal of chemical wastes. The State has filed a civil complaint against the owner and operators of the site to require full cleanup of the site. In addition, EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further federal actions at the site.

Response category / Cleanup status code, October 1984: S

SHARKEY LANDFILL
Parsippany/Troy Hills, New Jersey

Conditions at listing (December 1982): Sharkey Landfill covers 200 acres in Parsippany and Troy Hills, New Jersey. The privately-owned landfill ceased operation in the early 1960s. It consists of two fill areas separated by the Rockaway River. The Sharkey Landfill has a long but undocumented history as a disposal site for municipal solid waste. In addition, industrial wastes reportedly have been dumped. State and EPA inspections have documented leachate seeps.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

SHIELDALLOY CORP.
Newfield Borough, New Jersey

Conditions at listing (September 1983): Shieldalloy Corp. manufactures specialty alloys, particularly chromium, on 61.6 acres in Newfield Borough, Gloucester County, New Jersey. The plant now treats its process waste water before discharging it. In the past, however, the plant released the water directly to an unlined lagoon and to surface water. Analyses conducted by the State detected extensive hexavalent chromium contamination in ground water and surface water. The area is totally dependent upon ground water for drinking supplies.

The State has issued numerous directives to the company since 1970. In 1972, the State condemned Newfield Borough Well #2A due to chromium contamination. The company is under a State directive to prepare a detailed proposal for decontaminating ground water.

Status (June 1984): EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: D

SOUTH BRUNSWICK LANDFILL
South Brunswick, New Jersey

Conditions at listing (December 1982): The South Brunswick Landfill covers 68 acres in a rural residential area in South Brunswick, New Jersey. The privately-owned site, now closed, consists of two mounds separated by a small stream that is a tributary of Heathcote Brook. EPA has found that both ground water and surface water are contaminated with various chemicals, including vinyl chloride, toluene, benzene, and heavy metals. There are private water wells within 3 miles of the site.

Status (July 1983): Under the terms of a Consent Order with EPA, the owner is currently cleaning up the site.

Response category / Cleanup status code, October 1984: V / I

SPENCE FARM
Plumstead Township, New Jersey

Conditions at listing (October 1981): Spence Farm occupies 5 acres in Plumstead Township, Ocean County, New Jersey. The site, a working farm, is flat, dropping off into a marshy, wooded floodplain. The population in the area relies on ground water for drinking water and surface water for irrigation. Between 1963 and 1970, drums and free-flowing liquids were dumped off the edge of the field into the floodplain, then covered over. A limited investigation by the State found a number of organic and inorganic pollutants in ground water and surface water, and organic pollutants in air.

The Spence Farm, Friedman Property, Goose Farm, and Pijak Farm (the so-called "Plumstead Sites") are within a 2-mile radius.

Status (July 1983): In September 1982, EPA awarded a $2,538,000 Cooperative Agreement to New Jersey. Under the agreement, $288,000 is being used on a feasibility study to evaluate various alternative methods for excavating the waste and disposing of it. The study is scheduled to be completed in the second quarter of 1984. The remaining $2,250,000 is to design and implement the alternative selected.

Response category / Cleanup status code, October 1984: R

SWOPE OIL & CHEMICAL CO.
Pennsauken, New Jersey

Conditions at listing (July 1982): Swope Oil & Chemical Co. is one of many companies in an industrial complex north of Pennsauken, New Jersey. Problems at the site include contaminated soil; an unlined lagoon containing various hydrocarbons, phenols, and metals; and approximately 150-250 deteriorated and leaking drums. Adjacent to the drum storage area are about 16 3,000- to 20,000-gallon storage tanks surrounded by a 10-inch earth dike. The contaminated area covers about 1 acre. A municipal well is located about 1,000 feet from the site. Past State inspections indicate that spills probably have occurred and entered storm sewers via drainage ditches along the north and southeast sides of the property.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. EPA is planning a remedial investigation to determine the type and extent of contamination at the site.

Response category / Cleanup status code, October 1984: V R / I

SYNCON RESINS
South Kearny, New Jersey

Conditions at listing (July 1982): Syncon Resins once manufactured paints, varnishes, and resins on a 5-acre site in South Kearny, Hudson County, New Jersey. The company closed in 1981 and declared bankruptcy. The site is situated within a coastal wetland management area and is bordered on the west by the Passaic River, a tidal waterway. About 11,000 55-gallon drums are stored in warehouses and also in the open on the ground. Analyses indicate that many drums contain hazardous substances. Many are volatile and flammable, posing the threat of air pollution and fire. Some drums have rusted, spilling their contents onto the soil. Several bulk storage tanks suspected of containing hazardous substances are also on the site. Two unlined ponds used for subsurface disposal of process waste contain hazardous organics. A large amount of soil is contaminated, and ground water is contaminated with organic chemicals, including benzene, PCBs, and toluene.

Status (July 1983): In December 1982, EPA awarded a $2,115,000 Cooperative Agreement to New Jersey for (1) an initial remedial measure involving removal of surface drums and (2) a long-term feasibility study to fill any gaps in the information on ground water and to identify alternatives for remedial action at the site. The work is scheduled to be completed in the first quarter of 1984.

Response category / Cleanup status code, October 1984: R / O

TABERNACLE DRUM DUMP
Tabernacle Township, New Jersey

Conditions at listing (September 1983): The Tabernacle Drum Dump covers 1 acre in a farmland and wooded area in Tabernacle Township, Burlington County, New Jersey. In 1977, 120 55-gallon drums and several 5-gallon pails of solvents, paint, and paint sludges were dropped off trucks, with the resident's permission, for a fee of $2.00 per drum.

The State has found toluene and ethyl benzene in drums. Several have rusted and released their contents. Carbon tetrachloride is present in soil on the site, according to the State.

There is the potential to contaminate ground water serving 6,000 residents.

Status (June 1984): On Feb. 17, 1984, EPA issued a unilateral Administrative Order under CERCLA Section 106 to one of the responsible parties. The order requires the party to remove the drums and start a ground water monitoring program.

Response category / Cleanup status code, October 1984: V F

U.S. RADIUM CORP.
Orange, New Jersey

Conditions at listing (December 1982): U.S. Radium Corp. formerly processed radium on a 1-acre site in the highly populated area of Orange, Essex County, New Jersey. Seven commercial/industrial buildings are currently on the site. From 1915 through 1926, the company processed 0.5 tons of ore per day and disposed of the processed ore on-site. These data indicate that 1,600 tons of wastes were dumped on the site. The State has found radon and its decay products in the air in concentrations considered excessive. In addition, radiation levels in areas around the property are greater than normal.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

UNIVERSAL OIL PRODUCTS (CHEMICAL DIVISION)
East Rutherford, New Jersey

Conditions at listing (December 1982): Universal Oil Products (Chemical Division) once manufactured specialty chemicals on an 85-acre site in East Rutherford, Bergen County, New Jersey. The company razed the plant in 1980. Waste solvents and solid chemical wastes were dumped into two unlined lagoons, which were later filled in. Surface water, ground water, and a large quantity of soils are contaminated. Ground water provides process cooling water to industry and drinking water to residents of Wallington Township.

The site is in the coastal wetland management area of the Hackensak River Basin. It is bordered on the southeast by Berry's Creek; one of its tributaries, Ackerman's Creek, passes through the site. Berry's Creek joins the Hackensack River about 3.5 miles downstream. Surface waters are used for recreation.

Status (July 1983): The State issued an Administrative Order and Directive Letter to the site owners to conduct a remedial investigation.

Response category / Cleanup status code, October 1984: S

UPPER DEERFIELD TOWNSHIP SANITARY LANDFILL
Upper Deerfield Township, New Jersey

Conditions at listing (September 1983): The Upper Deerfield Township Sanitary Landfill is an active 14-acre sanitary landfill operated by Upper Deerfield Township in a rural area of Cumberland County, New Jersey. On-site monitoring wells and five private wells are contaminated with mercury and chlorinated solvents, according to analyses conducted by the State. The wells tap the Cohansey Aquifer, the major source of drinking water for the area. The contamination is traveling south toward other residential wells. There are no substantiated reports of hazardous material being disposed of at the landfill, so the amount and sources remain unknown. Further contamination of the aquifer is of concern.

The State and local health department advised affected residents not to drink their water and are monitoring other homes in the immediate area for signs of contamination.

Status (June 1984): The State is negotiating with the township for cleanup of the site.

Response category / Cleanup status code, October 1984: D

VENTRON/VELSICOL
Wood-Ridge Borough, New Jersey

Conditions at listing (September 1983): The Ventron/Velsicol Site was a chemical-processing operation from before 1953 until it closed in 1974. The site is on 19 acres bordering Berry's Creek and the Hackensack Meadowlands in Wood-Ridge Borough, Bergen County, New Jersey. The region is densely populated and industrialized. Heavy metals are leaving the site in ground water and air, threatening extensive wetlands and a very large population, according to the State. There is also a significant direct contact hazard from wastes dumped on the ground.

The State filed suit in 1976 against the company seeking a judgment of liability and funds to clean up the site. The Chancery Division found for the State in 1979. Following appeal by the defendants, the Appellate Division found for the State in 1981. The case is now before the Supreme Court of New Jersey.

The State is considering various remedial actions; costs are expected to be at least $4 million.

Status (June 1984): EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: S

VINELAND CHEMICAL CO., INC.
Vineland, New Jersey

Conditions at listing (September 1983): Vineland Chemical Co., Inc., has manufactured arsenic-based herbicides since before 1966 on 26 acres in suburban Vineland, Cumberland County, New Jersey. Prior to 1977, the company stored byproduct arsenic salts in open piles and chicken coops. As a result, contaminated ground water and run-off have entered the Blackwater Branch of the Maurice River, according to the State. The area is highly dependent upon ground water for drinking supplies.

In 1979, the company, under a State Administrative Order, began operating a ground water decontamination system and currently recycles all its process water in a closed system. Under an Administrative Consent Order in December 1981, the company maintains an 11-well ground water monitoring system. However, the decontamination system can treat only 25,000 to 35,000 gallons of ground water per day, while an estimated 600,000 gallons leave the site daily.

Status (June 1984): EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: D

VINELAND STATE SCHOOL
Vineland, New Jersey

Conditions at listing (December 1982): The Vineland State School in Vineland, Cumberland County, New Jersey, operated an unregulated incinerator and landfill for disposal of its waste. Between the 1950s and mid-1960s, 6,000 to 8,000 quart cans of mercury-based pesticide were dumped in a pit near the incinerator. The incinerator has since been disassembled, and the pit filled and graded. The landfill is also reported to contain pesticides. The homes nearest to the dump depend on the Cohansey Aquifer for water.

Status (July 1983): The State has installed three monitoring wells, which detected arsenic above the water quality standard. The State has discovered three additional disposal areas at the school: another pesticide dump, an area where PCBs from the school's transformers were dumped, and an old landfill. Analyses of soils near the spill detected 10 to 67 parts per million PCBs. The State is also sampling three of the eight private wells on the site.

EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

W. R. GRACE & CO. (WAYNE PLANT)
Wayne Township, New Jersey

Conditions at listing (September 1983): W.R. Grace & Co. extracted thorium and rare earths from monazite ore on a 6.5-acre site in Wayne Township, Passaic County, New Jersey, from 1948 to 1971. First the operation was under the supervision of Rare Earth, Inc., and then Davison Chemical, a division of W.R. Grace. Grace ceased processing monazite ore in 1971 and amended its license to cover only storage of radioactive materials.

The company and its consultant decontaminated the site in 1974, and in 1975 the U.S. Nuclear Regulatory Commission released the site for unrestricted use provided the land deed indicated that radioactive material was buried on the property. The waste consists of residues from processing monazite ore and from the decontamination. An aerial survey performed by EPA in May 1981 indicated elevated radiation levels at the plant site and an area to the west. As a result of extensive soil contamination, the overburden covering the waste disposal area on the site may be insufficient to prevent further movement of the contaminated soil by run-off.

Status (June 1984): The U.S. Department of Energy is addressing the site under a $2 million appropriation as part of its Formerly Utilized Site Remedial Action Program (FUSRAP).

Response category / Cleanup status code, October 1984: R / O

WILLIAMS PROPERTY
Swainton, New Jersey

Conditions at listing (December 1982): The Williams Property is an abandoned waste dump covering 5.6 acres in a rural-agricultural region of Swainton, Cape May County, New Jersey. The property is near coastal wetlands and wildlife management areas. Surface water bodies are used for recreation, while aquifers supply water for about 60 percent of the population of Cape May County.

The State drilled and sampled monitoring wells on the site. Analyses revealed high concentrations of toxic and highly volatile organics. The shallow Holly Beach Aquifer has been polluted by the dumping, confirmed by records, of about 225 drums of liquid hazardous wastes in 1979. During initial inspections, the State observed heavy organic odors, extensive soil contamination, and damaged vegetation. The State removed about 1,200 cubic yards of contaminated soil and transported it to the Browning-Ferris Industries Landfill in Glen Burnie, Maryland.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

WILSON FARM
Plumstead Township, New Jersey

Conditions at listing (September 1983): The Wilson Farm Site covers 438 acres in Plumstead Township, New Jersey. It is one of seven "Plumstead" sites in Ocean and Monmouth Counties, of which four were placed on the National Priorities List in September 1983. All sites are within a 20-square-mile rural farming area. The site was used for the disposal of 620 cubic yards of contaminated soil and hazardous materials during the late 1960s and early 1970s. In September 1980, the State removed the contaminated soil and hazardous materials, but surface water and ground water are still threatened.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

WOODLAND ROUTE 532 DUMP
Woodland Township, New Jersey

Conditions at listing (September 1983): The Woodland Route 532 Dump covers about 35 acres of relatively flat land in Woodland Township in rural Burlington County, New Jersey. In the early 1960s, the owner accepted wastes from several chemical manufacturers for open burning, dumping, and burial of drummed and bulk chemical wastes. This location came into use after complaints from nearby residents forced abandonment of a nearly identical site along Route 72. On-site are several sludge mounds, numerous sandy depressions containing drums, and a pond filled with thick oil. Sampling by the State and EPA indicates heavy contamination with organic solvents, heavy metals, and suspected carcinogens. These materials threaten ground water, surface water, and air, and show potential for harm through direct contact.

Status (June 1984): EPA is planning a remedial investigation/ feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: D

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

WOODLAND ROUTE 72 DUMP
Woodland Township, New Jersey

Conditions at listing (September 1983): The Woodland Route 72 Dump occupies about 15 acres of relatively flat land in Woodland Township in rural Burlington County, New Jersey. During the 1950s, the owner accepted wastes from several chemical manufacturers for open burning, dumping, and burial of drummed and bulk chemical wastes. The site closed in 1959. On-site are several sludge mounds, numerous sandy depressions containing drums, and a pond filled with thick oil. Sampling by the State and EPA indicates heavy contamination with organic solvents, heavy metals, and suspected carcinogens. These materials threaten ground water, surface water, and air, and show potential for harm through direct contact.

Status (June 1984): EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: D

AT&SF (CLOVIS)
Clovis, New Mexico

Conditions at listing (October 1981): The Atchison, Topeka, and Santa Fe Railway (AT&SF) has conducted switchyard and car repair activities in Clovis, New Mexico, since the early 1900s. Activities over the past 30 years have included washing of hopper cars and refueling of locomotives. Waste water from the various operations discharges to a nearby playa lake, a potential source of contamination of the underlying aquifer. In addition, diesel oil from fueling operations at the site has been found atop the aquifer, which supplies drinking water to Clovis.

Status (July 1983): EPA has requested that the company determine the extent of contamination at the site and develop any needed remedial program.

Response category / Cleanup status code, October 1984: V F

HOMESTAKE MINING CO.
Milan, New Mexico

Conditions at listing (October 1981): The Homestake Mining Co. has operated a uranium mill near Milan, New Mexico, since 1958. Seepage from two large tailings ponds on the site has contaminated a shallow aquifer that provides water to residents in several downgradient subdivisions. The water is unsafe for drinking and cooking.

Status (July 1983): The State is requiring the company to undertake long-term restoration of the aquifer through a Ground Water Discharge Plan. The company is collecting contaminated water in the shallow aquifer in wells and is injecting water from a deeper uncontaminated aquifer in an effort to flush and improve the quality of the contaminated shallow aquifer.

EPA negotiated with the company to supply an alternate source of drinking water for residents of the subdivisions. A Consent Decree signed in June 1983 provides for extension of the Village of Milan public water system to the subdivisions. Under terms of the decree, Homestake will pay for extension of the system and hookup of individual residences, as well as monthly water charges for 10 years.

Response category / Cleanup status code, October 1984: V F / I

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SOUTH VALLEY
Albuquerque, New Mexico

Conditions at listing (July 1982): The South Valley Site covers about 2 square miles of Albuquerque, New Mexico. In 1979, wells in the San Jose well field became contaminated by organic compounds, forcing closing of one private well and two Albuquerque municipal wells. Numerous sources are suspected of contributing to the problem.

This is the top priority site in New Mexico.

Status (July 1983): The State, with a grant of $80,200 made available through the Clean Water Act, is attempting to determine the extent of ground water pollution and possible specific sources of the contaminants. In addition, EPA is evaluating methods of restoring the capacity of the Albuquerque wells lost due to contamination.

EPA is starting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R F

UNITED NUCLEAR CORP.
Church Rock, New Mexico

Conditions at listing (October 1981): United Nuclear Corp. has operated a uranium mill on a 640-acre site near Church Rock, New Mexico (approximately 17 miles northeast of Gallup) since May 1977. Tailings from the mill are deposited in a large impoundment on-site. A break in the tailings dam in 1979 released 93 million gallons of tailing fluid to the Rio Puerco River. Subsequently, seepage from the impoundment contaminated the Upper Gallup aquifer in the vicinity of the pond.

Status (July 1983): New Mexico is requiring the company to address ground water contamination through a Ground Water Discharge Plan. For the State to approve the plan, it must include monitoring of ground water around the site, a program to control the migration of contaminants, and neutralization of the contents of the impoundment. The plan has not yet been approved.

Response category / Cleanup status code, October 1984: F

AMERICAN THERMOSTAT CO.
South Cairo, New York

Conditions at listing (December 1982): The American Thermostat Co. Site covers 100 acres in South Cairo, New York. The firm dumped sludge containing trichloroethylene (TCE) on its property from 1968 until the spring of 1981. In 1981, local officials discovered that surface water, sewer outfalls, on-site soils, and domestic wells downgradient of the site were contaminated with TCE. Residents in the affected area were advised not to drink or cook with their well water. American Thermostat is supplying them with bottled water. Over 5,000 people within 3 miles of the site use ground water as drinking water.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site.

The State has started legal action against the company.

Response category / Cleanup status code, October 1984: V

BATAVIA LANDFILL
Batavia, New York

Conditions at listing (October 1981): The Batavia Landfill covers 21 acres near Batavia, Genesee County, New York. It is owned and operated by the Town of Batavia. In the past, industrial wastes, including magnesium sludges, chromium hydroxide sludges, spent solvents, and oils, were disposed of at the site. Run-off from the site has been observed entering Galloway Swamp, a protected wetland adjacent to the site. Ground water appears to be the greatest concern due to the potential contamination of an underlying aquifer which supplies drinking water to about 6,500 people within 3 miles of the site.

Status (July 1983): EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and to identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: V

BREWSTER WELL FIELD
Putnam County, New York

Conditions at listing (December 1982): The Brewster Well Field serves the Village of Brewster in Putnam County, New York. Volatile halogenated organic chemicals from an unknown source contaminate 18 shallow wells. Two emergency wells show a rise in trichloroethylene.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. EPA and the State are negotiating a Cooperative Agreement for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R

National Priorities List Site

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/"Superfund")

FACET ENTERPRISES, INC.
Elmira, New York

Conditions at listing (October 1981): Facet Enterprises, Inc., manufactures motor components on a 31-acre site in Elmira, New York. On-site are numerous discrete areas including waste pits, lagoons, and surface dumps. Wastes known to have been disposed of at the site include cyanide salts, heavy metal sludges, spent solvents, and various quenching and cutting oils. Heavy metals and PCBs have been detected in the soil, and trichloroethylene (TCE) and other volatile organics in on-site drainage ditches that flow into nearby creeks. Ground water appears to be the contamination route of major concern. TCE has been detected at Facet's process well about 2,000 feet east of the site and at the Elmira Water Board's Sullivan Street Well about 2 miles south. The site is adjacent to a residential area and is less than 200 feet from the nearest house.

Status (July 1983): Facet has entered into an administrative order on consent with EPA to study hydrogeologic conditions at the site. The study is scheduled to be completed in the fourth quarter of 1983.

Response category / Cleanup status code, October 1984: V

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

FULTON TERMINALS
Fulton, New York

Conditions at listing (December 1982): The Fulton Terminals Site covers 2 acres adjacent to the Oswego River in Fulton, New York. It has been alleged that up to 31,000 gallons of waste oils and sludges have been stored in tanks on the site, which is now inactive. In recent years, the State has supervised removal of some wastes by the owner. All but 5,000 gallons of sludge were removed and transported to an approved disposal site.

The State has detected PCBs on-site. EPA sampled surface water sediment around a discharge pipe that was once connected to one of the storage tanks. Analyses verified a number of contaminants associated with waste oil. At present, the source of contaminants cannot be proved using analytical methods. The site is unfenced and easily accessible.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D / O

GENERAL MOTORS (CENTRAL FOUNDRY DIVISION)
Massena, New York

Conditions at listing (September 1983): The General Motors (Central Foundry Division) Site is a 165-acre aluminum casting facility on the St. Lawrence River, in Massena, St. Lawrence County, New York. The site contains two areas that have received an estimated 30,000 cubic yards of PCB-contaminated sludges generated from recycling of hydraulic oil formerly used in the plant's machinery. A portion of the waste lies below the water table. An additional 9,000 gallons of contaminated oil are stored in an abandoned pump house. Analyses by the State indicate that ground water and surface water are contaminated on the site. Runoff is towards the Raquette River, St. Lawrence River, and the St. Regis Indian Reservation; all are about 1,000 feet from the site. The company's response to an information request letter indicates there are other areas of concern at the facility.

Status (June 1984): EPA and the State are planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: F

GE MOREAU
South Glen Falls, New York

Conditions at listing (December 1982): The General Electric Co. Moreau Site, also known as Caputo Landfill, covers 40 acres in South Glen Falls, Saratoga County, New York. Wastes are scattered over the entire site. Also on the site are a small evaporation lagoon and a drum disposal area. Liquid PCB wastes were dumped into the lagoon, previously an open sand pit. Soil in the drum disposal area, which holds about 100 drums, is contaminated. Numerous private drinking wells and the public wells for Fort Edwards are in the area. Due to chemical contamination, treatment units have been installed in private wells south of the site.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of clean up required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: V

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/"Superfund")

HOOKER (HYDE PARK)
Niagara Falls, New York

Conditions at listing (December 1982): Hooker's Hyde Park landfill covers 16 acres in Niagara Falls, Niagara County, New York, only a few blocks east of a 500-home residential community. About 80,000 tons of chemical wastes were dumped at this site, owned by Occidental Chemicals Corp. (OCC--formerly known as Hooker Chemicals and Plastics Corp.). The wastes include hexachlorocyclopentadiene (C-56), trichlorophenols, and chlorinated benzofluorides.

Monitoring data show that surface water and ground water have been contaminated by wastes leaching from this landfill. Dioxin has been found in the sediment taken from Bloody Run creek, which drains the site. This creek runs through the residential community and discharges into the Niagara River gorge.

On Januaary 19, 1981, the Federal and State governments and OCC signed a Consent Decree. This agreement, which became effective on July 1, 1982, specifies the process by which OCC will remedy the problems at the site, maintain these remedies, and ensure that they remain effective.

Status (July 1983): Hooker is currently implementing the measures specified in the consent agreement.

Response category / Cleanup status code, October 1984: V R S / O

HOOKER (S-AREA)
Niagara Falls, New York

Conditions at listing (December 1982): Hooker's S-Area Landfill covers 8 acres on the Buffalo Avenue Plant in Niagara Falls, Niagara County, New York. The plant is owned by Occidental Chemicals Corp. (OCC—formerly known as Hooker Chemicals and Plastics Corp). From 1947 to 1975, OCC dumped about 65,000 tons of inorganic and organic wastes at S-Area, which is built on partially reclaimed land from the Niagara River. These wastes include: hexachlorobutadiene (C-46), hexachlorocyclopentadiene (C-56), chlorinated benzenes, chlorinated toluenes, trichlorophenols, benzene, and toluene.

Both surface water and ground water are contaminated. Chemicals have migrated through the bedrock and overburden to adjacent areas. Traces of S-Area chemicals have been detected in the finished drinking water from Niagara Falls' water treatment plant, which is about 200 yards east of S-Area. This plant serves 77,000 people. Contaminated run-off and ground water flow into the Niagara River.

The Department of Justice, on behalf of EPA, has brought a Federal civil action against OCC seeking injunctive relief.

Status (July 1983): To alleviate the threat to drinking water, the city has closed the contaminated main intake tunnel and put an emergency tunnel into service.

In June 1983, EPA allocated a first installment of $700,000 for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: F S

HOOKER (102ND STREET)
Niagara Falls, New York

Conditions at listing (December 1982): The Hooker portion of the 102nd Street landfill covers 16 acres east of Griffon Park in Niagara Falls, Niagara County, New York. From 1943 to 1975, Occidental Chemicals Corp. (formerly known as Hooker Chemicals and Plastics Corp.) dumped approximately 23,000 tons of chemical waste at the site, including hexachlorocyclohexanes, organic phosphates, chlorinated hydrocarbons (including chlorinated benzenes and toluenes), benzyl chloride, benzoyl, and acids.

Both surface water and ground water are contaminated. The point where wastes have leached into the Niagara River is about 2.8 miles upstream of the intake tunnels for Niagara Falls' water treatment plant, which serves about 77,000 people. Besides contamination of the river and the city's drinking water supply, the other major concern is the contamination of Lake Erie.

The Department of Justice, on behalf of EPA, has brought a Federal civil action seeking injunctive relief against parties potentially responsible for wastes associated with the site.

Status (July 1983): EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: V F S

HUDSON RIVER PCBs
Hudson River, New York

Conditions at listing (September 1983): The Hudson River PCBs Site is a 40-mile stretch of the Hudson River between Mechanicville and Fort Edward, New York. General Electric Co. discharged an estimated 1.1 million pounds of PCBs into this stretch of river. The State has identified 40 "hot spots," defined as sediments contaminated with greater than 50 parts per million (ppm) of PCBs. Also included in the site are five "remnant" areas, which are river sediments exposed when the level of the river was lowered due to removal of the Fort Edward Dam. The State has taken initial measures to stabilize the remnant areas from erosion.

In September 1980, Congress passed an amendment to the Clean Water Act (CWA) that included the Hudson River PCB Reclamation Demonstration Project. Under this legislation, the EPA Administrator could authorize a 75 percent grant, not to exceed $20 million. EPA issued a final Environmental Impact Statement in October 1982 evaluating various dredging alternatives for a demonstration project. EPA has prepared a feasibility study to evaluate alternative remedial actions under CERCLA. The Administrator has determined that CERCLA funds may be used for remedial action at the remnant areas and for evaluating the effectiveness of the water supply system at Waterford, New York.

Status (June 1984): EPA has completed a draft feasibility study identifying alternatives for remedial action. A search for parties potentially responsible for wastes associated with the site has been completed, and EPA has sent letters to two potentially responsible parties notifying them of possible legal action under CERCLA.

Response category / Cleanup status code, October 1984: R

KENTUCKY AVENUE WELL FIELD
Horseheads, New York

Conditions at listing (July 1982): The Kentucky Avenue Well Field in Horseheads, New York, is part of the Elmira Water Board system, which supplies water to over 60,000 residents in Elmira, Elmira Heights, and Horseheads, New York. In September 1980, the well field was closed because it was contaminated with trichloroethylene. Private water wells believed to be in the same aquifer, including an industrial well serving Facet Enterprises, Inc., were also contaminated. The Elmira Water Board is using temporary alternative water supplies instead of the Kentucky Avenue Wells.

Four known disposal sites operated in the area in the 1940s and 1950s; the source of ground water contamination, however, is unclear. EPA detected metals, phthalates, and tetrachloroethylene in surface water upgradient of the well field.

Status (July 1983): EPA has conducted an initial evaluation of the need for remedial action at the site.

Response category / Cleanup status code, October 1984: R

LOVE CANAL
Niagara Falls, New York

Conditions at listing (October 1981): Love Canal is a 16-acre landfill in the southeast corner of the City of Niagara Falls, New York, about 0.3 miles north of the Niagara River, in the 1890s, a canal was excavated to provide hydroelectric power. Instead, it was later used by Hooker Electrochemical for disposal of over 21,000 tons of various chemical wastes. Dumping ceased in 1952. In 1953, the disposal area was covered and deeded to the Niagara Falls Board of Education. Extensive development occurred near the site, including construction of an elementary school and numerous homes.

Problems with odors and residues, first reported at the site during the 1960s, increased in the 1970s as the water table rose, bringing contaminated ground water to the surface. Studies indicate that numerous toxic chemicals have migrated into surrounding areas. Run-off drains into the Niagara River at a point 2.8 miles upstream of the intake tunnels for Niagara Falls' water treatment plant, which serves about 77,000 people. At this dicharge points, the river sediment has also become contaminated.

Between 1977 and 1980, New York State and the Federal government spent about $45 million at the site: $30 million for relocation of residents and health testing, $11 million for environmental studies, and $4 million for a demonstration grant (under the Resource Conservation and Recovery Act) to build a leachate collection and treatment system.

Status (July 1983): A study completed in 1982 recommended as the long-term solution construction of a slurry wall and cap to contain ground water in the site.

In July 1982, EPA awarded a $6,995,000 Cooperative Agreement to New York for (1) construction of a slurry wall and cap, (2) four feasibility studies, and (3) a long-term monitoring study to determine seasonal variations in ground water levels and leaching. In September 1982, $892,800 were added to (1) demolish the school, (2) install a synthetic membrane over a temporary clay cap, and (3) erect a fence. Construction of the slurry wall and cap is scheduled to be completed in the fourth quarter of 1983, and the feasibility studies in the third quarter of 1983.

The Department of Justice, on behalf of EPA, has brought a Federal civil action seeking injunctive relief against parties potentially responsible for wastes associated with the site.

Response category / Cleanup status code, October 1984: R F S / O

LUDLOW SAND & GRAVEL
Clayville, New York

Conditions at listing (December 1982): The Ludlow Sand & Gravel Site is an active landfill of about 5 acres in Clayville, just south of Utica, New York. The owner has accepted various industrial wastes (including PCBs, solvents, and heavy metals) and municipal wastes. A portion of the site is uncovered. Debris is washing down into a swamp, and leachate is running into a State-protected wetland. Surface water is contaminated with PCBs. The site is not fenced. The nearest residence is about 0.5 miles from the site and uses a private well.

Status (July 1983): The Town of Paris, New York, is suing to force Ludlow to stop all dumping at the site.

EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

MARATHON BATTERY CORP.
Cold Springs, New York

Conditions at listing (October 1981): The Marathon Battery Corp. Site is in Cold Springs, New York. The U.S. Army Corps of Engineers built a plant at Foundry Cove by the Hudson River in 1953 to make nickel-cadmium batteries. In the 1960s, the plant was sold to a private firm and then resold to another firm that manufactures airplane batteries. From 1953 to 1959, plant wastes containing cadmium were dumped at the edge of a marshy area that leads into the Hudson River. As early 1966, the State cited the plant for its discharges and ordered it to clean up its emissions.

Analyses of discharge areas revealed concentrations of over 60,000 parts per million (ppm) cadmium, with values of about 1,000 ppm in the surrounding land. In an attempt to correct the problem, the company dredged the outfall site. As a result, the cadmium is now spread over the bottom of the cove at concentrations of about 1,000 ppm. While the cadmium remains largely localized, the tides that sweep in and out of the cove daily are slowly flushing the cadmium into the Hudson River. The dredged cadmium-containing material has been placed in an underground vault on the Marathon Battery site.

Within 3 miles of the site, the Gordon School, the Post Road Mobile Home Park, and a number of residences are served by ground water. No other source of drinking water is available.

Status (July 1983): The State and EPA are negotiating a Cooperative Agreement for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R

MERCURY REFINING, INC.
Colonie, New York

Conditions at lsiting (December 1982): Mercury Refining, Inc., processes industrial wastes to reclaim mercury in Colonie, New York, near the Albany City boundary. On the property is a 0.5-acre dumping area littered with thousands of cases of miniature silver-mercury batteries. Tests indicate the waste is at least 3 feet deep. The site is adjacent to Patron Creek, a tributary to the Hudson River, which feeds the Three Mile Water Works, an alternate water supply for Albany. Stream sediments have high concentrations of heavy metals, including mercury, as well as PCBs.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

NIAGARA COUNTY REFUSE
Wheatfield, New York

Conditions at listing (October 1981): The Niagara County Refuse Site is an inactive 50-acre landfill in Wheatfield, New York. The landfill was operated by the county from 1968 until 1976. Large amounts of industrial waste chemicals are alleged to have been buried on the site. Analyses of leachate and sediments detected PCBs, chlorinated organics, and heavy metals. Contaminated run-off flows into the Black Creek and into the Niagara River about 5 miles upstream from the water intake that helps supply water to the 77,000 residents of Niagara Falls. Organic vapors are coming from the site, which is within 0.3 miles of private residences.

Status (July 1983): EPA conducted a hydrogeological investigation of the site in April 1983. Results are pending. EPA plans to perform any other studies needed to determine the extent of contamination.

Response category / Cleanup status code, October 1984: D

OLD BETHPAGE LANDFILL
Oyster Bay, New York

Conditions at listing (October 1981): Old Bethpage Landfill covers 2 acres in Oyster Bay, Nassau County, New York. It is inactive, but is within an active sanitary landfill complex. The area around the site, with the exception of Bethpage State Park to the south, is fairly well developed with residences and industrial facilities.

Oyster Bay began operating the Old Bethpage Landfill in 1957, primarily for disposing incinerator residue. In 1967, the town began accepting garbage and trash and allowing home owners to dump trash. From 1968 through 1978, liquid and solid industrial process wastes and damaged drums containing organic residues were disposed of at the site. In 1978, Oyster Bay applied to the State for a permit to operate a sanitary landfill. Since then, the only industrial waste disposed of at the landfill has been metal hydroxide sludges. The exact location of the hazardous wastes is unknown because they were deposited with other wastes throughout the landfill over 10 years.

There is no surface water near the site. However, there are several ground water recharge basins used to dispose of scrubber water from incinerators. The site, as is all of Long Island, is located above the Magothy Aquifer, which supplies many public wells.

Status (July 1983): EPA has prepared a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: V S

OLEAN WELL FIELD
Olean, New York

Conditions at listing (October 1981): The Olean Well Field is within both the Town and City of Olean, Cattaraugus County, New York. The 1-square mile site contains three public water supply wells and numerous private wells, in addition to municipal and industrial dumps. Excessive levels of trichloroethylene (TCE) were discovered in public wells in late 1980. Several suspected sources of contamination have been identified. Olean now gets its drinking water from a nearby well field and from surface water, which must be treated in an aging filtration plant. Private wells continue to draw water from the contaminated aquifer.

Status (July 1983): In January 1982, $25,000 in CERCLA emergency funds were used to install carbon filters in 16 homes and businesses with contaminated wells. The county maintains and operates the filters. Since late 1981, EPA has approved $632,000 (some of it under a Cooperative Agreement) for a remedial investigation to determine the extent and type of contamination at the site and a feasibility study to identify alternatives for remedial action. The work, scheduled to begin in the third quarter of 1983, includes a modeling of the aquifer system to identify source (s) of contamination.

Response category / Cleanup status code, October 1984: V R / O

POLLUTION ABATEMENT SERVICES (PAS)
Oswego, New York

Conditions at listing (October 1982): Pollution Abatement Services (PAS), now bankrupt, operated a liquid waste incineration facility just east of Oswego, New York, from 1970 through 1976, when it was closed by the State. Remaining on the 15-acre site were toxic, flammable, and explosive wastes, including off-specification polymer gels, plating wastes, metals sludges, paint wastes, and laboratory chemicals. The wastes were in 15,000 drums, in lagoons, and in six surface and buried storage tanks. Ground water is polluted, as is surface water, which discharges into Lake Ontario approximately 1 mile from Oswego's drinking water intake.

Between 1977 and 1981, EPA, with $2.1 million made available under Section 311 of the Clean Water Act, removed and disposed of oil and hazardous liquid wastes, including large quantities of materials contaminated with PCBs.

This is the top priority site in New York.

Status (July 1982): In July 1982, $100,000 in CERCLA emergency funds were approved to control run-off, repack leaking drums, and erect a fence. Since early 1981, EPA has approved $3.4 million (through a Cooperative Agreement and contracts) for removal of remaining surface wastes (completed in December 1982) and a feasibility study to identify alternatives for remedial action to clean up subsurface contamination (scheduled to be completed in the third quarter of 1983).

EPA plans to send letters to generators of wastes at the site asking them to participate in the cleanup.

The Department of Justice, on behalf of EPA, has brought a Federal civil action seeking injunctive relief against PAS and its principals.

Response category / Cleanup status code, October 1984: R F / O

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

PORT WASHINGTON LANDFILL
Port Washington, New York

Conditions at listing (December 1982): The Port Washington Landfill, also known as the Town of North Hempstead L-4 Landfill, has been in continuous operation since March 1974 on the western side of Hempstead Harbor within Port Washington, Nassau County, New York. The site is bordered by sand pits, the North Hempstead Country Club, and a residential community. The Salem School, which is adjacent to the residential area, is less than 700 feet from the site. Before North Hempstead operated the site as a landfill, it was used for sand mining. At the time, the site sloped gently from an elevation of 40 to 60 feet above mean sea level and terminated in a 100-foot cliff. Over the years, the landfill has accepted refuse at the rate of 200,000 tons per year. This has created a fill 115 feet thick and extending 15 feet above the cliff.

Area residents have complained of gas problems at the site. In early 1981, Nassau County found that methane was migrating off-site and, in a number of instances, creating potentially explosive conditions in adjacent homes. Benzene, toluene, xylene, and vinyl chloride were identified in gas from the landfill. Ground water in a deep zone (100 to 110 feet below sea level) under the landfill has a high salt content from sand-washing operations when the site was used for sand mining.

Status (July 1983): The State is working with the Town of North Hempstead for cleanup of the site.

EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

RAMAPO LANDFILL
Ramapo, New York

Conditions at listing (December 1982): The Ramapo Landfill covers 45 acres in Ramapo, Rockland County, New York. It opened in 1972. In 1978, the State denied the operators a permit because of an incomplete permit application and violations of State codes. The facility received sludge from a cosmetic company, and midnight dumping may have occurred. In 1980, about 50 drums containing an unknown waste were observed on the site. Leachate from the site is contaminating Torne Brook, a tributary to the Ramapo River. Monitoring wells around the facility have detected various pollutants, including toluene, xylene, and methylene chloride. Wells providing water for the Spring Valley Water Co. are close to the site.

Status (July 1983): The State has entered into a Consent Agreement with the Town of Ramapo, the site owner, to clean up the site. EPA will evaluate the provisions of the Consent Agreement by preparing a remedial plan, which will outline the investigations needed to determine the full extent of cleanup at the site.

Response category / Cleanup status code, October 1984: V

SINCLAIR REFINERY
Wellsville, New York

Conditions at listing (July 1982): The Sinclair Refinery Site in Wellsville, New York, is a 100-acre refinery that closed in 1963. Throughout the operation and dismantling of the refinery, various types of wastes (including cloth filters, fuller's earth, oil sludges, contaminated soil, and fly ash) were disposed of in a 10-acre landfill adjacent to the Genesee River. In addition, oil and other materials from spills when the refinery was in operation have apparently saturated much of the soil in the 90-acre refinery portion of the site. These materials are leaching into the Genesee River.

Wellsville draws its drinking water from the Genesee River about 0.5 miles downstream of the site. The river has changed course and is now eroding the edge of the disposal area. Oily material enters the Genesee River, and debris from the site litters the banks of the river downstream of the disposal area. The oily material has been detected in raw water entering the Wellsville water treatment plant. The State found mercury, PCBs, and oil components in samples collected at the site. The contaminants may be entering ground water, which supplies about 1,600 nearby residents.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site.

The State applied to EPA for a $780,000 Cooperative Agreement to do remedial investigations/feasibility studies. The first is to select a method for stabilizing the eroding landfill and install gates and warning signs to limit access. The second is to evaluate and select a cleanup plan for the entire site.

As a temporary means of stabilizing the landfill, the State has constructed a channel to accommodate a 2-year frequency flood.

Response category / Cleanup status code, October 1984: V R

SOLVENT SAVERS
Lincklaen, New York

Conditions at listing (December 1982): Solvent Savers recovered solvents on a 13-acre site in Lincklaen, New York, from 1967 to 1974. The owner and operator hauled waste solvents from Syracuse area industries for reprocessing or disposal. Large quantities of bulk and drummed liquid, soil, and semisolid wastes may have been dumped into two 15- to 20-foot deep pits on the property. There are also indications that a tanker was buried.

EPA and the State have conducted extensive investigations of the site, including sampling of soil, surface water, stream sediment, and fish. Seven wells have been installed to monitor ground water, and buried drums have been surveyed. PCBs, chloroform, tetrachloroethylene, phenol, naphthalene, and 1,2-dichlorobenzene have been detected in ground water in the immediate vicinity.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

SYOSSET LANDFILL
Oyster Bay, New York

Conditions at listing (December 1982): The Syosset Landfill is in Oyster Bay, New York. The town suspended operations at the landfill in January 1975 after Nassau County detected water pollution. Investigations revealed high concentrations of heavy metals in the industrial sludges being deposited, as well as in wastes discharged from scavenger plant operations. In addition, volatile organic compounds in two private wells and one Jericho Water District well are substantially above safe drinking levels. The site is located in the county's primary ground water recharge area. A school is nearby.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

VESTAL WATER SUPPLY WELL 1-1
Vestal, New York

Conditions at listing (December 1982): The Vestal Water Supply Well 1-1, in Vestal, Broome County, New York, is contaminated with high levels of 1,1,1-trichloroethane and trichloroethylene. Other wells in Water District #1 have smaller amounts of chlorinated organic chemicals. Some wells in Water District #4 are also contaminated. Further work is needed to locate and eliminate the sources endangering the water supply for this town of 6,000 people.

Status (September 1983): In December 1982, EPA proposed the Vestal Water Supply Site for listing. Later, EPA discovered that there were two separate plumes of contaminated ground water from two separate sources. Thus, the site was divided into two sites--Vestal Water Supply Well 1-1 and 4-2--and both are being placed on the NPL at this time.

Response category / Cleanup status code, October 1984: R

VESTAL WATER SUPPLY WELL 4-2
Vestal, New York

Conditions at listing (December 1982): The Vestal Water Supply Well 4-2, in Vestal, Broome County, New York, is contaminated with high levels of 1,1,1-trichloroethane and trichloroethylene. The State has taken legal action against Monarch Chemical Co. and other potentially responsible parties concerning contamination of the well. Other wells in Water District #4, as well as in District #1, also contain chlorinated organic chemicals. Further work is needed to locate and eliminate the sources endangering the water supply for this town of 6,000 people.

Status (September 1983): In December 1982, EPA proposed the Vestal Water Supply Site for listing. Later, EPA discovered that there were two separate plumes of contaminated ground water from two separate sources. Thus, the site was divided into two sites--Vestal Water Supply Well 4-2 and 1-1--and both are being placed on the NPL at this time.

Response category / Cleanup status code, October 1984: S

WIDE BEACH DEVELOPMENT
Brant, New York

Conditions at listing (December 1982): Wide Beach Development is a subdivision of 66 homes covering 60 acres on Lake Erie in Brant, Erie County, New York. The site is immediately north of the Cattaraugus Indian Reservation. Waste oils were spread on roads for dust control from the 1940s to 1978. Erie County received a complaint of odors near the site. Its investigation confirmed that PCBs exist throughout the area in soils, surface water, air, dust, and several private wells.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

National Priorities List Site

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

YORK OIL, CO.
Moira, New York

Conditions at listing (July 1982): York Oil Co. formerly recycled waste oils on a 17-acre site in Moira, New York. The State identified the facility as an environmental problem after it was sold to local residents. The site consists of two storage tanks filled with PCB-contaminated oil, one graded lagoon, and two consolidated lagoons which are filled with PCB-contaminated soils and sludges and capped with kiln dust and sand. Before the site was abandoned, it consisted of eight steel storage tanks, two buildings, and three lagoons.

The berms of the lagoons have failed in the past, discharging oil into the adjacent wetlands that drain into Lawrence Brook. Analyses indicate 50 parts per million (ppm) of PCBs in lagoon waters, and up to 350 ppm in solids. In 1980 and 1981, using about $790,000 made available under Section 311 of the Clean Water Act and CERCLA, EPA took steps to minimize off-site migration of PCBs. Actions included closing the facility, partially cleaning up the wetlands area, treating oil wastes from one of the lagoons, and interim closing of the remaining two lagoons. However, oil, soil, and sludges containing PCBs remain at the site and adjacent wetlands. The site threatens the area wildlife as well as the wetlands. The threat to the area's drinking water is undefined at present.

Status (July 1983): In June 1983, using CERCLA emergency funds, EPA collected seeping oil, constructed filter fences, posted warning signs, and placed barriers to prevent vehicles from entering. Concurrently, EPA is negotiating a Cooperative Agreement with New York to perform a remedial investigation/feasibility study to determine the type and extent of contamination that remains and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R F / O

CHEMTRONICS, INC.
Swannanoa, North Carolina

Conditions at listing (December 1982): The Chemtronics, Inc., Site covers 10 acres in Swannanoa, North Carolina, in the Picrate Branch drainage basin. Two areas are involved. Number of 1 consists of eight abandoned acid and organic waste pits used by Chemtronics and its predecessors. Number 2 consists of two lined basins for neutralization and equalization of wastes prior to their discharge into the Metropolitan Sewage District Collection facilities.

The pits were closed in December 1979. Five were covered, and three holding liquids were left uncovered. All lie in the drainage basin of Gregg Branch. Two wells monitoring ground water near the pits were contaminated by numerous organic compounds and metals. One well monitoring leachate contained numerous organics, metals, and high dissolved solids. The leachate was also highly acidic. A monitoring well about 100 feet northeast of the site showed a dramatic increase in dissolved solids between April 1981 and March 1982. Lead, barium, cadmium, nitrates, and nitrites were found in excessive quantities, in addition to many identified and unidentified organic compounds.

A basin liner in the second area failed in June 1979, discharging waste into ground water and possibly surface water. In 1980, the liner was replaced. During an inspection of the site, an organic odor was noted in holes drilled to determine the depth to the water table and the nature of the underlying material.

Status (July 1983): EPA is considering various alternatives for this site.

Response category / Cleanup status code, October 1984: D

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/"Superfund")

MARTIN MARIETTA, SODYECO, INC.
Charlotte, North Carolina

Conditions at listing (December 1982): The Martin Marietta Sodyeco, Inc., Site covers 100 acres just west of Charlotte, Mecklenburg County, North Carolina. The facility manufactures chemical dyes for the textile industry. In October 1980, the company reported that organic solvents had infiltrated into ground water at the site. In April 1981, the company reported that wells and streams near the site contained various toxic organic chemicals, including chlorinated compounds, some in concentrations as high as 16 parts per million. Tests indicated that the chemicals came from an on-site landfill, which was later closed and its contents moved to an approved site.

According to the April 1981 report, only the drinking water from the company well and two nearby commercial sites (a tavern and a convenience food store) was significantly affected. Martin Marietta purchased and closed the tavern and supplied a carbon filter system to the convenience store to reduce organic compounds in the water.

Five additional residential wells and three commercial wells contained solvent levels ranging from just detectable to 3 parts per billion. The company purchased and vacated three of the residences and also purchased a gas station for use as a monitoring site. The company concluded that the remaining residences and commercial sites were not significantly affected but is still maintaining carbon filter systems at each location.

Status (July 1983): EPA is considering various alternatives for this site.

Response category / Cleanup status code, October 1984: D

PCB SPILLS
210 Miles of Road, North Carolina

Conditions at listing (October 1981): Between June and August 1978, over 30,000 gallons of industrial waste containing PCBs were deliberately discharged along 210 miles of highway shoulders in 14 counties of North Carolina. In late August, the State covered the spill areas with activated charcoal and liquid asphalt. Because of the quantity of soils involved and the distances to approved landfills, the State decided to construct a new landfill. In December 1978, North Carolina sought EPA approval for a PCB landfill in Warren County. EPA approved the landfill site in June 1979, subject to compliance with a number of technical and procedural conditions.

This is the top priority site in North Carolina.

Status (July 1983): In May 1982, EPA awarded a $2,543,700 Cooperative Agreement to North Carolina for a remedial action to: (1) construct the landfill; (2) remove, transport, and dispose of the contaminated soils; and (3) reconstruct the highway shoulders. The landfill was constructed in the summer of 1982. Disposal of contaminated soils was completed in November 1982, and the landfill was capped, graded, and seeded.

Response category / Cleanup status code, October 1984: R F / C

ARSENIC TRIOXIDE SITE
Southeastern North Dakota

Conditions at listing (October 1981): The Arsenic Trioxide Site covers 700 square miles in Sargent, Richland, and Ransom Counties in southeastern North Dakota. Heavy grasshopper infestations in the 1930s resulted in large and repeated applications of arsenic-based poisons such as arsenic trioxide. Dated or excess poisons were often buried near shallow aquifers, left unmarked in outbuildings, hauled to open dumps, or thrown onto agriculturally unproductive lands. Arsenic levels exceeding the maximum acceptable limit set by Federal drinking water standards were identified in the Lidgerwood city water supply, as well as in numerous private wells on farms. Rutland and Wyndmere water supplies also contain arsenic.

This is the top priority site in North Dakota.

Status (July 1983): In August 1982, EPA awarded a $218,000 Cooperative Agreement to North Dakota for a remedial investigation to determine the extent of arsenic contamination in ground water and soils. The work is scheduled to be completed in the fourth quarter of 1984.

Response category / Cleanup status code, October 1984: R

ALLIED CHEMICAL & IRONTON COKE
Ironton, Ohio

Conditions at listing (December 1982): The Allied Chemical & Ironton Coke Site covers 40 acres in Ironton, Lawrence County, Ohio. It involves two adjacent industrial facilities that use lagoons to hold hazardous wastes on their properties. Hazardous wastes such as lime sludge and tar sludge located between the two facilities are suspected of contaminating ground water. Studies detected ammonia, chloride, cyanides, phenols, and thiocyanates in ground water, creating a potential for affecting local wells. There is also a potential for contamination of the Ohio River and Ice Creek, which supply municipal drinking water.

Status (July 1983): Ironton Coke is no longer using its lagoons.

Response category / Cleanup status code, October 1984: R F

ARCANUM IRON & METAL
Darke County, Ohio

Conditions at listing (December 1982): The Arcanum Iron & Metal Site covers 10 acres in Arcanum, Darke County, Ohio. The facility has been in the scrap metal/recycling business since the early 1960s. It now recycles lead batteries. Large piles of battery casings, lead, and lead oxides are on the property, as well as standing pools of acid wastes. Acid overflow from this operation has killed both fish and vegetation in Painter Creek downstream of the site. Arcanum's water supply is furnished by wells within 1 mile of the site, and private wells are also nearby. In October 1979, the State entered into a Consent Decree with the owner to clean up the site, but the results were not satisfactory. The defendant subsequently was found in contempt of the Darke County Court of Common Pleas, but the site has not been cleaned up.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R F

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

BIG D CAMPGROUND
Kingsville, Ohio

Conditions at listing (December 1982): Big D Campground, a 10-acre site in Kingsville, Ohio, was originally a sand and gravel pit. From 1964 to 1976, wastes, some known to be hazardous, were dumped in the pit. Leachate from the site is contaminating Conneaut Creek with chlorobenzene. There is potential for contamination of ground water.

Status (July 1983): After negotiating with the State, one of the companies responsible for sending wastes to the facility has completed a soil erosion control program.

EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

BOWERS LANDFILL
Circleville, Ohio

Conditions at listing (December 1982): Bowers Landfill, also known as Island Road Landfill, covers 80 acres about 1 mile north of Circleville, Ohio, within the Scioto River floodplain. The site is situated over a very productive aquifer (capable of yields of 1,000 gallons per minute) that supplies both industrial and domestic water. In 1958, a gravel pit started operations on the site. Shortly thereafter, a landfilling operation started in which soil from the nearby pit was used to cover refuse dumped on top of the existing surface. Little is known of the initial years of the landfill, but from 1963 to 1968, it accepted organic and inorganic chemicals and general domestic and industrial refuse. In response to a Congressional inquiry, two local chemical manufacturers stated that in excess of 7,500 tons of chemical waste (physical state and concentrations unknown) had been disposed of at this site. In July 1980, EPA identified toluene and ethylbenzene in water from the landfill. The State worked with the current owner, who hired an engineering firm to evaluate the site. The State reviewed the report and asked for additional information.

Status (July 1983): The State reviewed the additional information from the owner and is awaiting the final remedial plan EPA is preparing. It will outline the investigations needed to determine the full extent of cleanup required at the site.

Response category / Cleanup status code, October 1984: V

BUCKEYE RECLAMATION
St. Clairsville, Ohio

Conditions at listing (December 1982): The Buckeye Reclamation Site, a former strip mine, covers 50 acres near St. Clairsville, Belmont County, Ohio. It was licensed as a sanitary landfill but also accepted industrial wastes, including sludges and liquids, without State approval. Industrial wastes were dumped into permeable mining wastes. The slopes of the filled area are steep, and the mining wastes used for cover are eroding. Substantial amounts of leachate from the rear of the site have entered a stream adjacent to a private home. The site has polluted McMahon Creek, which may be used for recreational purposes. There is potential to contaminate local wells.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

CHEM-DYNE
Hamilton, Ohio

Conditions at listing (October 1981): Chem-Dyne Corp. began operating a chemical waste transfer, disposal, and storage facility on a 10-acre site in Hamilton, Ohio, in 1975. The facility handled a variety of wastes, including pesticides, PCBs, polybrominated biphenyls, TRIS, lab packs, acids, resins, solvents, heavy metals, and cyanides. Fires, explosions, and fish kills have occurred from the facility's operations. Contamination of air, soil, surface water, and ground water has been documented.

In July 1979, a stipulation and judgment entry was filed in State court requiring, among other things, that all material be removed from the site by July 1980. In February 1980, the State court appointed a receiver to direct, manage, and control the assets and business activities of Chem-Dyne and to carry out the stipulation.

In May 1980, EPA used $22,000 made available under Section 311 of the Clean Water Act to stabilize, remove, and dispose of 17 potentially explosive drums. The State has spent $300,000 on site cleanup.

This is the top priority site in Ohio.

Status (July 1983): In November 1981, the receiver informed the court that he lacked the funds to eliminate the inventory, as required by the stipulation. In 1982, EPA approved $3.8 million for site cleanup, part of it for a Superfund State Contract with Ohio to remove surface wastes, including 9,000 drums and 200,000 gallons of liquid and solid wastes in 33 storage tanks. On Aug. 26, 1982, EPA reached a settlement with 112 companies that had generated wastes on the site. They are contributing $2.4 million to the surface cleanup, which is being managed by the U.S. Army Corps of Engineers, and a study of ground water, scheduled to be completed in the fourth quarter of 1983. On the same day, the Department of Justice, on behalf of EPA, brought a Federal civil action seeking injunctive relief against the owners and operators of Chem-Dyne, as well as the major waste generators that declined to participate in the cleanup.

The surface cleanup is scheduled to be completed in the fourth quarter of 1983. A remedial investigation and feasibility study are underway to determine alternatives for cleanup of contaminated soil and ground water. The work is scheduled to be completed in the second quarter of 1984.

Response category / Cleanup status code, October 1984: V R F S / O

onal Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

COSHOCTON LANDFILL
Franklin Township, Ohio

Conditions at listing (December 1982): The Coshocton Landfill covers 50 acres in Franklin Township, Coshocton County, Ohio. From 1969 to 1979, the site was operated by the City of Coshocton as a sanitary landfill. It also accepted industrial wastes, including (reportedly) paints, sewage, oily wastes, chlorinated organic solvents, PCBs, caustics, and various organic compounds and metals. After landfill operations stopped, surface coal mining started. Leachate is discharging to a tributary of the Muskingum River.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: F

E.H. SCHILLING LANDFILL
Hamilton Township, Ohio

Conditions at listing (December 1982): E.H. Schilling Landfill covers 5 acres in Hamilton Township, 4.5 miles downriver from Ironton, Ohio. The site, which was privately owned and operated, was licensed by the State to receive industrial waste. It operated from April 1972 to July 1980, when its license was revoked because it accepted liquid waste and failed to cover waste properly with soil. While the landfill was operating, hazardous substances entered surface water. After the landfill closed, the site was covered. Leachate is still migrating from the landfill, although the owner has attempted to contain the flow.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

FIELDS BROOK
Ashtabula, Ohio

Conditions at listing (October 1981): Fields Brook is located in Ashtabula in the northeastern corner of Ohio. It meanders for approximately 4 miles, first though a diversified chemical industrial complex and then through a residential area in Ashtabula, before emptying into the Ashtabula River. The site consists of the brook plus the 14 industries bordering it. Both point and nonpoint sources adjacent to Fields Brook have contaminated its sediments with a variety of toxic chemicals, including PCBs and other chlorinated organics, mercury, chromium, and arsenic. The contaminated sediments threaten drinking water intakes of Lake Erie. Analyses of fish flesh indicate the bioaccumulation of chlorinated organics, posing a secondary threat to people who consume contaminated fish.

Status (July 1983): In September 1982, EPA approved $450,000 for a remedial investigation to identify the existing and potential sources of contamination, as well a routes of contamination, and a feasibility study to identify alternatives for remedial action. For the remedial investigation/feasibility study, the site also includes the Ashtabula River and harbor, since contamination in those sediments can be linked to the brook. However, any remedial action will be limited to the brook and surrounding industrial sites, since the Ashtabula River and harbor are maintained by the Army Corps of Engineers for navigation purposes. The work is scheduled to be completed in the fourth quarter of 1984.

Response category / Cleanup status code, October 1984: D

FULTZ LANDFILL
Jackson Township, Ohio

Conditions at listing (December 1982): The Fultz Landfill covers 40 acres in Jacksonville Township, Guernsey County, Ohio. It is a privately-owned landfill that accepts a variety of industrial and commercial wastes. Contaminants (including ethylene glycol and methylene chloride) have been found in nearby Will's Creek. A trace of methylene chloride has also been found in Byesville's municipal water.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

LASKIN/POPLAR OIL CO.
Jefferson Township, Ohio

Conditions at listing (July 1982): The Laskin/Poplar Oil Co. Site covers 10 acres in Jefferson Township, Ashtabula County, Ohio. It is an abandoned greenhouse and waste oil recovery operation. Liquids stored in ponds and tanks contain heavy metals, PCBs, and other organics. The tanks and ponds have the potential to overflow, leak, or collapse because of poor construction and maintenance. Any contaminants released would enter Cemetery Creek, which runs adjacent to the site. The creek, a tributary of the Grand River, is the source of drinking water for 24,000 Ashtabula County residents.

In late 1980, following a discharge of oil into Cemetery Creek, emergency response funds under Section 311 of the Clean Water Act were used for cleanup and containment activities. In early 1981, emergency funds were needed to prevent oil from spilling into the creek. The cost of the two actions was $479,000.

The Department of Justice, on behalf of EPA, brought a Federal civil action seeking injunctive relief against parties responsible for wastes at the site. This resulted in a suit in 1979 under the Resource Conservation and Recovery Act. A Consent Decree in 1980 committed the company to clean up the site. When it did not, $1.2 million in CERCLA emergency funds were allocated to eliminate the threat posed by two open storage tanks and two large lagoons containing contaminated oil.

This site was once listed under the name "Poplar Oil Co."

Status (July 1983): In May 1983, EPA approved $430,000 for a (1) remedial investigation to determine the type and extent of contamination both on- and off-site and (2) a feasibility study to identify exposure pathways and alternatives for remedial action at the site.

Response category / Cleanup status code, October 1984: R F / O

MIAMI COUNTY INCINERATOR
Troy, Ohio

Conditions at listing (September 1983): The Miami County incinerator and its associated landfill are located in Miami County, Ohio, 2 miles north of Troy. The complex represented the first county-wide solid waste management program in Ohio when it opened in 1968 on county-owned land. It was envisioned to be an environmentally safe, cost-effective disposal method for residential, commercial, and industrial wastes for 20 years. The incinerator was designed to burn 150 tons per day of combustible rubbish. Nonburnables and incinerator residue were to be landfilled.

A combination of poor geologic location and environmentally unsound disposal practices resulted in significant contamination to one of the most productive and valuable aquifers in Ohio. Solid wastes were landfilled within 6 feet of the water table. Scrubber water from the incinerator stacks and quench water from the ashes were discharged to an infiltration lagoon. Bulk liquid wastes (estimates vary from 104,000 to 150,000 drum equivalents) were allowed to percolate directly into the ground until this practice was stopped in 1974. All landfilling operations stopped in 1978, and the site now serves as a transfer station for wastes that are disposed of elsewhere.

Heavy metals, chlorinated hydrocarbons, and aromatic solvents contaminate the aquifer, according to tests conducted by the State. The nearest residential wells are about 1,000 feet downgradient of polluted wells. Municipal wells serving 19,000 people are within 3 miles of the site.

Status (June 1984): EPA is reviewing a draft work plan for a remedial Investigation/Feasibility study to determine the type and extent of contamination and identify alternatives for remedial action. EPA is also conducting a search for parties potentially responsible for wastes associated with the site.

Response category / Cleanup status code, October 1984: F

NEASE CHEMICAL
Salem, Ohio

Conditions at listing (December 1982): The Nease Chemical Site occupies 40 acres in Salem, Mahoning County, Ohio. It manufactured chemicals such as pesticides and fire retardants from 1961 until 1973, when the State closed it because it discharged waste water illegally. While the plant was operating, process wastes were put into drums, which were then buried on-site. Also, wastes were placed in unlined lagoons as part of waste water treatment. The drums are leaking, and the lagoons are leaching. An on-site well and leachate from a lagoon contain organic compounds, including chlorinated organics.

Status (July 1983): EPA is considering various alternatives for this site.

Response category / Cleanup status code, October 1984: D

NEW LYME LANDFILL
New Lyme, Ohio

Conditions at listing (December 1982): New Lyme Landfill occupies 40 acres in New Lyme, Ashtabula County, Ohio. Detailed plans for the site to operate as a sanitary landfill were approved in May 1971. The county closed the site in 1978 because it was not complying with several landfill regulations. While in operation, the privately-owned site accepted some industrial wastes, including cyanide sludge in drums. Leachate containing organics discharges from two sides of the fill area, threatening surface waters. There is also concern that ground water might be contaminated by leachate from the landfill.

Status (July 1983): In July 1983, EPA approved $360,000 to proceed with (1) a remedial investigation to determine the type and extent of contamination both on- and off-site and (2) a feasibility study to evaluate alternatives for controlling source(s) of contamination.

Response category / Cleanup status code, October 1984: V

OLD MILL
Rock Creek, Ohio

Conditions at listing (December 1982): The Old Mill Site in Rock Creek, Ashtabula County, Ohio, consists of two adjacent areas: a former potting soil processing operation (1 acre) and a drum storage area (5 acres). About 1,400 drums of flammable hazardous substances, including resins, solvents, oils, and aqueous/acid materials, accumulated at the site. In 1980, the owner filed for bankruptcy. PCBs have been detected on the site, which is close to a school and several houses. The possibility of fire or explosion is a concern.

The site was once listed under the name "Rock Creek/Jack Webb."

Status (July 1983): EPA negotiated with responsible parties for removal of about 550 drums. EPA removed the remaining drums and 80 cubic yards of contaminated soils using $110,000 in CERCLA emergency funds.

Response category / Cleanup status code, October 1984: R F / O

POWELL ROAD LANDFILL
Dayton, Ohio

Conditions at listing (September 1983): Powell Road Landfill covers 67 acres in Dayton, Ohio. The privately-owned operation began in 1959 and is still active. Records indicate that for approximately 2 years at least 250 drums of wastes, including strontium chromate and benzidine, were delivered to the site every month. The wastes, in solid, sludge, and liquid form, are toxic, persistent, flammable, and highly volatile. There is no evidence of the landfill being lined, and some containers are leaking.

Ground water nearby supplies private wells. The surface water is used for recreational purposes. The site is filled to about 30 feet above the surrounding area. The top and sides of the inactive area of the landfill are seeded, and vegetation is beginning to grow.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

ional Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

PRISTINE, INC.
Reading, Ohio

Conditions at listing (December 1982): The Pristine, Inc., Site covers 3 acres in Reading Ohio. It borders on a railraod track with an adjacent trailer park and on the well field supplying Reading's water. Between November 1974 and June 1980, an incinerator for liquid wastes operated on the site. In April 1979, an inspection revealed the presence of 8,000 to 10,000 drums and 13 bulk storage tanks containing a wide variety of hazardous substances. Soil was contaminated, and there was the potential for contamination of ground water and surface water as well as for fires and explosiions.

After the facility closed in June 1980 as a result of State enforcement actions, responsible parties reduced the wastes to 15 drums and some bulk wastes. Threats posed by the facility have been greatly reduced, but contaminated run-off to Mill Creek may still be a problem.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: F / I

SKINNER LANDFILL
West Chester, Ohio

Conditions at listing (December 1982): The Skinner Landfill covers 85 acres in West Chester, Ohio, on a ridge about 30 feet above the East Fork of Mill Creek. The privately-owned facility, which was never licensed, closed in the early 1970s. On-site are (1) about 100 drums containing a variety of chlorinated organics, other organics, and heavy metals and (2) a lagoon once used to dispose of similar bulk wastes. The owner indicated that old demolition bombs were also disposed of on-site.

Although no contaminants have been detected leaving the site at this time, the potential exists for contamination of private drinking wells and surface water.

Status (July 1983): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

SOUTH POINT PLANT
South Point, Ohio

Conditions at listing (September 1983): The South Point Plant covers 75 acres on the Ohio River floodplain in South Point, Lawrence County, Ohio. From 1943 to 1979, Allied Chemical produced ammonia, urea, nitrogen fertilizer, melamine, and formaldehyde at the site. During operations, several landfills and surface impoundments were used for disposal of process wastes. An extraordinary number of leaks and spills in production areas, plus run-off from a large fire, have contaminated the aquifer under the site with nitrates and ammonia, according to analyses conducted by the State. The South Point well field is near the plant and is in jeopardy. Contaminants also have reached the Ohio River where Ashland, Kentucky, draws its water.

The present owner, Ashland Chemical, is monitoring the production wells on-site.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

SUMMITT NATIONAL
Deerfield Township, Ohio

Conditions at listing (October 1981): The Summitt National Site occupies 11 acres near Deerfield Township, Portage County, Ohio. From late 1972 to March 1978, it incinerated liquid wastes from about 60 companies. When it closed, an estimated 16,000 drums and 300,000 gallons of wastes , including flammable solvents, paint sludges, waste oil,and C-56 (a pesticide by product), remained on-site. Run-off from the facility threatened to contaminate the Berlin Reservoir, a backup water supply for Youngstown. Ground water and soils were contaminated. In October 1980, under Section 311 of the Clean Water Act, EPA spent $160,000 to remove material contaminated with C-56, which threatened the Berlin Reservoir. Between February 1980 and January 1981, the State spent $788,000 to control on-site pollution and to minimize public health hazards.

Status (July 1983): In November 1981, the State reached a settlement with a number of potentially responsible parties to finance a $2.4 million cleanup of the materials stored on the surface.

EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

UNITED SCRAP LEAD CO., INC.
Troy, Ohio

Conditions at listing (September 1983): The United Scrap Lead Co., Inc., Site covers 10 acres south of Troy, Ohio. Between 1948 and 1980, the company reclaimed lead batteries, generating an estimated 32,000 cubic yards of crushed battery cases, which were used as fill material. The battery acid and rinse water were disposed of in a 12-foot by 8-foot by 9-foot infiltration pit. State files suggest that 500 to 1,000 gallons per day of water containing 14.6 percent sulfuric acid and 20 to 100 milligrams per liter of lead were discharged to the pit. Monitoring wells on-site are contaminated with lead, according to tests conducted by the State. Two residential water wells contain lead above background levels but within the standards for drinking water.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

ZANESVILLE WELL FIELD
Zanesville, Ohio

Conditions at listing (December 1982): The Zanesville Well Field covers 1 acre northeast of Zanesville, Ohio, on the east side of Muskingum River. It supplies water to the city. In late 1981, the State found that 3 of the 13 production wells were highly contaminated. A ground water study conducted by EPA identified trichloroethylene (TCE) as a primary contaminant; lesser concentrations of dichloroethylene and chloroform were also present. The city took the three contaminated wells out of service and began flushing to remove contaminants remaining in the water lines. By August 1982, the contaminated wells were still not in use but were being continually pumped to reduce the contamination and prevent its further migration into the well field. A nearby production well was also not in use because of the danger of contamination.

Status (July 1983): The city is conducting a regular monitoring program at the site. A neighboring industry, after studying its operation, began to excavate buried wastes and treat local ground water.

Response category / Cleanup status code, October 1984: V

COMPASS INDUSTRIES (AVERY DRIVE)
Tulsa, Oklahoma

Conditions at listing (September 1983): The Compass Industries (Avery Drive) Site (originally listed as Compass Industries) is in an abandoned limestone quarry near the Arkansas River in Tulsa, Oklahoma. From 1972 to 1976, the 108-acre site was owned and operated by Compass Industries. Although permitted as a sanitary landfill, it may also have received an unknown quantity of hazardous wastes. Underground fires are a problem at the facility. Liquid waste seeping to the surface at the landfill contains PCBs, according to analyses conducted by the State. Surface run-off and possible ground water contamination are concerns, as are air releases from the fires.

Status (June 1984): The State and EPA are planning a Cooperative Agreement for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R

HARDAGE/CRINER
Criner, Oklahoma

Conditions at listing (October 1981): The Hardage/Criner Site covers 40 to 60 acres near Criner, McClain County, Oklahoma. The site consists of several surface impoundments and a drum burial area. More than 18 million gallons (bulk and containerized liquids and solids) were disposed of at the site, which was licensed by the State to accept industrial wastes. It started operating in late 1972 and continued until late 1980.

Substances found on-site include pesticides, solvents, alcohols, waste oils, paints, acids, caustics, and metal sludges. In 1976, the State found that on-site monitoring wells were contaminated. Subsequently, the State initiated an administrative enforcement action against the owner. An EPA inspection in 1979 also detected contamination of ground water and surface water.

In September 1980, the Department of Justice, on behalf of EPA, brought a Federal civil action seeking injunctive relief against Mr. Hardage, the owner of the site.

This site was once listed under the name "Criner/Hardage Waste Disposal."

Status (July 1983): The trial was held in September 1982, and in December 1982 the judge ruled that an imminent and substantial endangerment existed at the site and that Mr. Hardage is liable for all costs of removal or remedial actions at the site. A second trial will be held in the near future on the costs associated with response actions at the site.

In June 1983, EPA allocated $200,000 for a feasibility study to identify alternatives for remedial action at the site.

Response category / Cleanup status code, October 1984: F

TAR CREEK (OTTAWA COUNTY)
Ottawa County, Oklahoma

Conditions at listing (October 1981): The Tar Creek Site, near Picher, in Ottawa County, Oklahoma, covers 40 square miles. It is a portion of the Tri-State Mining District, which covers 100 square miles and extends into Missouri and Kansas. The area produced significant quantities of iron and zinc into the 1920s and 1930s. When major mining operations ceased in the early 1970s, ground water accumulated in the mines. In 1979, acid mine water with high concentrations of heavy metals began to discharge to the surface, contaminating surface water. This problem, along with the potential for contaminating the drinking water aquifer under the mining area, prompted the U.S. Geological Survey and the State to investigate the site. In 1981, the State declared the site its number one pollution problem.

Status (July 1983): In June 1982, EPA awarded a $435,368 Cooperative Agreement to Oklahoma for a remedial investigation to determine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the fourth quarter of 1983.

Response category / Cleanup status code, October 1984: R / I

GOULD, INC.
Portland, Oregon

Conditions at listing (December 1982): The Gould, Inc., Site covers about 10 acres in Portland, Oregon. The site was a battery recycling and disposal facility which Gould acquired in 1979. It also handled large quantities of lead wastes. The battery facility is no longer active, but a pile of more than 10,000 tons of battery castings remains on the site. Air, surface water, and ground water are contaminated with lead.

Status (July 1983): The States has cited Gould for water quality violations. The company and the State are negotiating to develop a plan for cleaning up the site.

Response category / Cleanup status code, October 1984: V / I

TELEDYNE WAH CHANG (ALBANY)
Albany, Oregon

Conditions at listing (December 1982): The Teledyne Wah Chang Site covers 100 acres in Albany, Linn County, Oregon. The company is the largest producer in the Western world of zirconium and other rare earth metals and alloys. Production began in 1957. Wastes have generally been disposed of on-site. Process wastes contain a large volume of solids that contribute radiation, heavy metals (barium, cadmium, chromium, and lead), and chlorinated solvents to ground water, surface water, and air. Radiation off-site is generally below established limits. Until 1980, sludges were taken to unlined storage ponds on company property adjacent to the Williamette River. In 1979, the plant added a process to reduce radiation in sludges and waste water. Sludges now have lower levels of radition than previously and are taken to lined dewatering ponds about 1 mile from the plant.

Status (July 1983): Wah Chang had requested permission from the State to cover the old storage ponds to minimize percolation that could contribute to possible leachate into the Williamette. In January 1983, the State drafted a permit indicating its preference for moving the sludges to another location on company property farther from the river. This action has been appealed.

EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

UNITED CHROME PRODUCTS, INC.
Corvallis, Oregon

Conditions at listing (September 1983): From 1960 through 1977, United Chrome Products, Inc., discharged an unknown quantity of chrome plating waste water into a dry well on a 2.5-acre site in Corvallis, Oregon. The facility continues plating operations on the site. Soil on the site, as well as sediments and water in adjacent surface drainages, including Booneville Slough, are contaminated with chromium, according to analyses conducted by the State and EPA. The level in Booneville Slough exceeds Oregon water quality standards and EPA recommended water quality criteria. An aquifer is beneath the site at 30 feet. The City of Corvallis supplies drinking water from this aquifer to the Airport Industrial Park. The effects of United Chrome's waste disposal practices on the aquifer are unknown at this time.

In early 1983, the State conducted a field investigation, which included sampling of soil and run-off at the facility, surface water and sediment in local drainages leading to the Willamette River, and four nearby wells. In June 1983, EPA drilled five additional deep wells into the aquifer to determine ground water flow.

Status (June 1984): Analyses of ground water samples taken in the summer of 1983 and in January 1984 show significant levels of chromium in the shallow zone around the dry well and lower levels in two of the five deep wells. Local city and private drinking water wells were also sampled in January 1984 and showed levels of chromium and lead well below maximum contaminant levels. Additional studies are planned to further define the extent of contamination.

Response category / Cleanup status code, October 1984: R

BERKS SAND PIT
Longswamp Township, Pennsylvania

Conditions at listing (September 1983): The Berks Sand Pit covers 0.5 acres in Longswamp Township near the Village of Huffs Church in Berks County, Pennsylvania. The privately-owned sand pit was used for disposal of chemical waste before it was filled in and regraded. Nearby residential wells serving three homes have been severely contaminated with organic compounds such as trichloroethane and 1,2-dichloroethane, as well as some metals, according to tests conducted by EPA and the State. Contaminated ground water is discharging into the headwaters of the north branch of the Perkiomen Creek, which is a major public water source for the Philadelphia Suburban Water Co. and is also used for recreational fishing.

In April 1983, EPA allocated $782,000 in CERCLA emergency funds to provide temporary drinking water to nearby residents, install a collection and treatment system, and remove contaminated material from the pit.

Status (June 1984): The State and EPA have signed a Cooperative Agreement for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. Also, EPA will assess the site to determine if any additional immediate response is necessary.

Response category / Cleanup status code, October 1984: R / O

BLOSENSKI LANDFILL
West Cain Township, Pennsylvania

Conditions at listing (December 1982): Blosenski Landfill, now inactive, covers 20 acres in West Cain Township, outside of Coatesville, Pennsylvania. While in operation in the 1970s, the site, which is privately owned, reportedly disposed of industrial and chemical wastes along with demolition and municipal wastes. Sampling of on-site wells shows that trichloroethylene, along with other organic and inorganic chemicals, has entered ground water.

Status (July 1983): Private wells were sampled in May 1983, and the results will show if contamination has moved off-site. Pennsylvania has taken a number of enforcement actions against the landfill operator, but the site has not been satisfactorily cleaned up.

EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. When the work is completed, EPA will negotiate with the responsible parties regarding cleanup of the site.

Response category / Cleanup status code, October 1984: F

BRODHEAD CREEK
Stroudsburg, Pennsylvania

Conditions at listing (December 1982): The Brodhead Creek Site covers 12 acres in Stroudsburg, Monroe County, Pennsylvania. From 1888 to 1944, a coal gasification plant operated there, disposing of 3 to 8 million gallons of coal tar. In 1981, the tar was found to be seeping into Brodhead Creek, a heavily used trout fishing stream. Ground water near the site was also contaminated with toxic organic chemicals associated with coal tar.

In the fall of 1981, using about $450,000 in CERCLA emergency funds, EPA took steps to stop the seepage. These actions included, in part, construction of filter fences and an underflow dam, construction of an underground slurry wall to contain the wastes and prevent uncontaminated ground water from entering, and partial excavation of coal-tar-contaminated soil. In addition, the current landowner pumped about 10,000 gallons of coal tar out of the ground.

Status (July 1983): On May 23, 1983, the Federal government filed a complaint in the U.S. District Court for the Eastern District of Pennsylvania to recover costs incurred by EPA and the Coast Guard in the response.

EPA and the current landowner have installed monitoring wells to determine the extent of ground water contamination. EPA is also preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R F / O

BRUIN LAGOON
Bruin Borough, Pennsylvania

Conditions at listing (October 1981): Bruin Lagoon covers about 4 acres adjacent to the western bank of the South Branch of Bear Creek in a highly industrialized narrow valley in Bruin Borough, Butler County, Pennsylvania. Homes adjoin the site. Bruin Lagoon is approximately 7 stream miles above where Bear Creek meets the Allegheny River, an important water supply source for many industries and communities, including Pittsburgh. The site consists of: (1) a 1-acre open sludge lagoon contained by a 22-foot earthen dike, (2) a 2-acre closed lagoon, (3) an effluent pond, (4) abandoned storage tanks and equipment, and (5) an area of contaminated soil on adjacent private property. The wastes on-site are primarily from the white oil manufacturing industry. They contain sulfuric acid, heavy metals, and other materials. Contamination of ground water, surface water, and air has been documented. Failure of the dike containing the open lagoon is the foremost concern.

In September 1981, $300,000 were made available under the Resource Conservation and Recovery Act for a remedial investigation to determine the type and extent of contamination at the site, for a feasibility study to identify alternatives for remedial action, and for design of the cost-effective remedy selected.

Status (July 1983): The feasibility study, completed in February 1982, calls for: removing the liquid floating on top of the open lagoon and disposing of it off-site, containing the remaining wastes on-site, stabilizing the lagoons and dikes, building a channel to prevent ground water from entering the site, and covering the site with an impermeable multilayer cap.

In September 1982, EPA signed a $3,073,000 Superfund State Contract with Pennsylvania for implementation of the remedial action. The work will be managed by the U.S. Army Corps of Engineers. Another $58,000 for additional studies were approved in December 1982. The corps advertised for bids in late May 1983. Construction is expected to begin in late summer and is scheduled to be completed in mid-1984.

Response category / Cleanup status code, October 1984: R / I

CENTRE COUNTY KEPONE
State College Borough, Pennsylvania

Conditions at listing (December 1982): The Centre County Kepone Site is a batch chemical manufacturing plant near State College Borough, Pennsylvania. The company manufactured Mirex in 1973 and 1974, and Kepone in 1958, 1959, and 1963.

Process wastes were originally disposed of on-site in a spray irrigation field and lagoon and stored in drums. The company later removed the drums and contaminated soil, treated the material in the lagoon to harden it, and buried it on-site. The material from the lagoon failed to harden properly, and contaminants were leaching to ground water and surface water. In 1982, the company excavated and removed the material and started to treat contaminated ground water.

Status (July 1983): EPA is planning additional sampling to determine the need for further remedial action at the site.

Response category / Cleanup status code, October 1984: S / O

CRAIG FARM DRUM
Parker, Pennsylvania

Conditions at listing (December 1982): The Craig Farm Drum Site in Parker, Pennsylvania, is a combination of several areas totaling 8 to 10 acres located on one property owned by a chemical manufacturer. Five sites (number 2, 3a, 3b, 3c, and a lagoon) have been investigated. From 1958 to 1963, Site 2, which is of most concern, was used for disposal of drums of hydroxy diphenyl wastes. Subsequently, the drums were coverd with dirt. Ground water contamination is the greatest concern. Also, a stream draining the site and flowing to the Allegheny River shows signs of contamination by the wastes.

Status (July 1983): As a result of negotiations with the State, the responsible party has agreed to make a study of the site. The study began in April 1983 and is scheduled to be completed late in the year. It will identify the wastes present, estimate the amounts, examine any contamination leaving the site, estimate the environmental effects, and assess remedial measures necessary to clean up the site. The study involves monitoring of ground water and testing throughout the site.

Response category / Cleanup status code, October 1984: D

DORNEY ROAD LANDFILL
Upper Macungie Township, Pennsylvania

Conditions at listing (September 1983): The Dorney Road Landfill covers 37.5 acres in Upper Macungie Township, Lehigh County, Pennsylvania, near the Lehigh County-Berks County border. The privately-owned site operated as an open dump from 1952 to 1966. From 1966 to 1978, it was leased and operated as a sanitary landfill. However, a variety of municipal and industrial waste is believed to have been buried at the site over the years. In 1980 and 1983, the State detected benzene, phenol, 1,1,1-trichloroethane, and lead in on-site monitoring wells. Pools of surface water are similarly contaminated.

Status (June 1984): The State and EPA have signed a Cooperative Agreement for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. Also, EPA will assess the site to determine if any immediate response is necessary.

Response category / Cleanup status code, October 1984: R

National Priorities List Site

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

DOUGLASSVILLE DISPOSAL
Douglassville, Pennsylvania

Conditions at listing (December 1982): The Douglassville Disposal Site covers 50 acres adjacent to the Schuylkill River in Douglassville, Pennsylvania. The company reclaims waste oils. From 1941 to 1972, waste oil sludge was placed in on-site lagoons. The contents were washed into the Schuylkill River during flooding in 1970 and 1972. After the 1972 flood, the sludge remaining in the lagoons was removed, and the lagoons were filled in and seeded. Sludge generated in the oil recovery process was land farmed on the site. From 1979 to 1982, about 700 drums, many leaking, were stored on the site. Pennsylvania ordered the facility to remove the drums and surface soil contaminated by their storage. This were done in April 1982. A 50,000-gallon tank that may contain water contaminated with solvents remains on-site. Sampling on the site indicates that ground water and soil in a drainage ditch have been contaminated with organic compounds and lead. In addition, some pollutants are being released into the Schuylkill River. The drinking water intake for the City of Pottstown is 2.3 miles downstream from the site.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

DRAKE CHEMICAL
Lock Haven, Pennsylvania

Conditions at listing (July 1982): Drake Chemical formerly manufactured chemical intermediates for pesticides and other organic compounds on an 8-acre site in Lock Haven, Clinton County, Pennsylvania. Operations started in the 1960s and closed when Drake filed for bankruptcy in the fall of 1981. On-site are 1,700 drums (many leaking and some labeled "cyanides"), numerous tanks, three large unlined lagoons filled with demolition debris, two lined lagoons, and a small feeder lagoon. The feeder lagoon is believed to be the source of a leachate stream flowing through a municipal park (which had to be closed) into Bald Eagle Creek, a major tributary of the Susquehanna River. Drums are emerging from unlined lagoons. Air, soil, and ground water are also contaminated. Sediments in the creek contain high concentrations of a herbicide and other chlorinated organic compounds.

In March and April 1982, EPA used $950,000 in CERCLA emergency funds to remove the 1,700 exposed drums and to drain and neutralize the tanks.

Status (July 1983): In January 1983, EPA signed a $475,000 Superfund State Contract with Pennsylvania for a remedial investigation to determine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action. The work is in two phases. The first deals with the migrating leachate stream and the second with the other wastes on the site. The remedial investigation/feasibility study is scheduled to be completed in the first quarter of 1984.

Response category / Cleanup status code, October 1984: R F / O

EAST MOUNT ZION
Springettsbury Township, Pennsylvania

Conditions at listing (September 1983): The East Mount Zion Site covers 10 acres in Springettsbury Township, York County, east of Mount Zion, Pennsylvania. It is on a wooded ridge whose southern and western slopes average 70 to 80 percent grade. The privately-owned site was never permitted, according to the State. It accepted both municipal and industrial wastes, including electroplating sludges, between 1947 and 1972, at which time it was deeded to a new owner. The land changed hands again in 1982.

The State detected vinyl chloride and benzene in ground water; trichloroethylene, phenol, and zinc in leachate; and cyanide, chromium, cadmium, nickel, zinc, and copper in the electroplating sludges. Residents within 1 mile of the site depend on ground water for their drinking water.

Status (June 1984): The State and EPA have signed a Cooperative Agreement for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. Also, EPA will assess the site to determine if any immediate response is necessary.

Response category / Cleanup status code, October 1984: R

ENTERPRISE AVENUE
Philadelphia, Pennsylvania

Conditions at listing (December 1982): The Enterprise Avenue Site covers about 57 acres along the Delaware River in Philadelphia, Pennsylvania. From 1971 to mid-1976, the city operated the site as a municipal landfill. At least 10,000 drums of hazardous wastes were dumped there without the city's permission. In 1978, the city discovered that various toxic wastes were being disposed of illegally at the site. In 1982, the city started cleanup actions, including removal of drums and soil. In October 1982, after spending $7 million cleaning up the site, the city ran out of money, leaving on-site 20,000 tons of contaminated soil.

Status (July 1983): EPA and the State are reviewing the site for potential CERCLA funding.

Response category / Cleanup status code, October 1984: R S / O

FISCHER & PORTER CO.
Warminster, Pennsylvania

Conditions at listing (December 1982): The Fischer & Porter Co. Site occupies about 6 acres in Warminster, Pennsylvania. It is an active facility that produces scientific equipment and chlorinators. In 1979, trichloroethylene and polychloroethylene were detected in local ground water. This contamination reached some wells of the Hatboro and Warminster Heights Water Authorities, forcing several wells to be closed in 1979.

Status (July 1983): A suit filed by EPA against the company in October 1980 is proceeding. Currently, EPA is in the final stage of negotiation.

Response category / cleanup status code, October 1984: V F

HAVERTOWN PCP
Haverford, Pennsylvania

Conditions at listing (December 1982): The Havertown PCP Site is located in Haverford, Pennsylvania. From 1947 to 1963, National Wood Preservers, Inc., disposed of waste liquids, primarily oil contaminated with pentachlorophenol (PCP), in a well that drained into ground water below the plant. This waste liquid eventually leached into Naylor's Run, a tributary of Cobbs Creek and the Delaware River. In 1976, EPA took emergency action to contain the leaching.

In 1973, the State took legal action against National Wood and others in the area to require a cleanup of the wastes. After seven years of litigation, the courts required National Wood to clean up the site.

Status (July 1983): The State and National Wood are negotiating a schedule for removing the wastes. Meanwhile, EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. If the States is unsuccessful in obtaining adequate cleanup of the site, EPA will determine what additional measures are required.

Response category / Cleanup status code, October 1984: R

HELEVA LANDFILL
North Whitehall Township, Pennsylvania

Conditions at listing (December 1982): The Heleva Landfill covers 93 acres in North Whitehall Township, Lehigh County, Pennsylvania. The site, which is privately owned, is believed to be the source of contamination of residential and public wells. Several were closed when high concentrations of trichloroethylene were found in the ground water near the site. The landfill closed early in May 1982.

Status (July 1983): The State is attempting to negotiate an agreement with the owner for cleanup of the site.

EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

HENDERSON ROAD
Upper Merion Township, Pennsylvania

Conditions at listing (September 1983): The Henderson Road Site in Upper Merion Township, Pennsylvania, is a well that contains such chemical wastes as benzene, chloroform, and 1,1-dichloroethane, according to tests conducted by Philadelphia Suburban Water Co. and EPA. These wastes pose a major threat to ground water and surface water. The Upper Merion Reservoir about 0.3 miles north of the site provides between 8 and 12 percent of the water annually distributed by the water company to its more than 800,000 customers. EPA drilled monitoring wells on- and off-site in January 1981, and took samples then and in February 1983. The results confirmed ground water contamination.

Status (June 1984): Using CERCLA funds, the State is undertaking a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: D

HRANICA LANDFILL
Buffalo Township, Pennsylvania

Conditions at listing (October 1981): The Hranica Landfill is a 10-acre drum disposal and landfill facility located in a farming community in Buffalo Township, Butler County, Pennsylvania. The privately-owned landfill stopped accepting industrial waste in 1974. The site contains about 7,700 55-gallon drums and larger vessels of waste consisting of solvents, paint pigments, and metal sludges. A preliminary investigation of the site by the generator of most of the waste showed that local soil, surface water, and ground water may be contaminated with organic and inorganic compounds.

Status (July 1983): The State is attempting to negotiate with two parties potentially responsible for wastes at the site.

Response category / Cleanup status code, October 1984: D

INDUSTRIAL LANE
Williams Township, Pennsylvania

Conditions at listing (September 1983): The Industrial Lane Site is in Williams Township, south of Easton, Pennsylvania. It includes a zoned industrial area and a 29-acre sanitary landfill located south of Industrial Lane. The landfill has been in operation since the late 19th century. The current owners purchased the Industrial Lane Site in 1958, at which time it was operating as an open dump. The owners are currently operating under a State sanitary landfill permit and are negotiating with the State for closure of a portion of the landfill and opening of a new area.

Several residences get drinking water from individual wells located between the landfill and the Lehigh River. In July 1982, EPA detected hazardous substances, including lead, benzene, chloroform, and carbon tetrachloride, in three private wells. The State and EPA are conducting a water sampling program of these and other private wells in the area and are also continuing their investigation of all potential sources of ground water contamination in the area.

Status (June 1984): EPA is beginning a remedial investigation to determine the type and extent of contamination at the site and will discuss plans for the investigation at a public meeting.

Response category / Cleanup status code, October 1984: F

KIMBERTON SITE
Kimberton Borough, Pennsylvania

Conditions at listing (December 1982): The Kimberton Site occupies about 1 acre in Kimberton Borough, Chester County, Pennsylvania. A local chemical company placed waste solvents in several unlined lagoons that later were found covered with soil. In the spring of 1982, ground water in the borough was found to be contaminated.

Above-background levels of trichloroethylene (TCE) and dichloroethylene (DCE) were detected in wells near the site. In addition, suspected carcinogens such as benzo(u) fluoranthene and benzo(a)orthracene were detected in a tributary to French Creek, which is used for recreation.

Status (July 1983): The State is negotiating a consent order with the suspected generator of the TCE and DCE wastes.

Response category / Cleanup status code, October 1984: D

LACKAWANNA REFUSE
Old Forge Borough, Pennsylvania

Conditions at listing (December 1982): The Lackawanna Refuse Site covers 258 acres in Old Forge Borough, Lackawanna County, Pennsylvania. In 1978, the State closed the privately-owned site for accepting industrial waste without a permit. One 5-acre strip pit contains 10,000 to over 100,000 drums of hazardous substances. Wastes were also disposed of on other parts of the property, but it is not known if they contained hazardous substances. Leachate flows from the site into an intermittent stream and drainage ditches and into the nearby St. John's Creek, which flows to the Lackawanna River. Organic vapors have been detected in the air near the 5-acre pit.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. In the summer of 1983, EPA is scheduled to start a remedial investigation to determine the type and extent of contamination at the site. It will be followed by a feasibility study to identify alternatives for remedial action.

In 1983, the owners and operators of the site pleaded guilty to failing to notify EPA that hazardous substances were disposed of, paid a $30,000 fine, and agreed to use the proceeds from any sale of the land to help finance a cleanup at the site. They were also convicted on criminal charges in a State action arising from operation of the landfill. The potential penalty associated with the State conviction is a fine of up to $100,000, 4 years imprisonment, or both.

Response category / Cleanup status code, October 1984: R F / O

LEHIGH ELECTRIC & ENGINEERING CO.
Old Forge Borough, Pennsylvania

Conditions at listing (October 1981): The Lehigh Electric & Engineering Co. Site, in Old Forge Borough, Pennsylvania, occupies approximately 5.4 acres adjacent to the Lackawanna River. The company operated a storage and repair facility for electrical equipment from the mid-1970s until March 1981. On-site are 4,000 pieces of equipment, some contaminated with PCBs. Analyses indicate that extremely high levels accumulated in the soil due to the indiscriminate disposal of dielectric fluids containing PCBs. Contamination of ground water and surface water is possible because the soil is highly permeable and the site is in the floodplain.

In April 1981, with $40,000 made available under Section 104 of the Clean Water Act, EPA fenced the site and analysed soil and water samples. In September 1981, using $350,000 made available under the Resource Conservation and Recovery Act, EPA started a remedial investigation to determine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action.

Status (July 1983): Early in 1982, an additional $148,000 were approved for the remedial investigation/feasibility study. In July 1982, EPA signed a $1,271,000 Superfund State Contract with Pennsylvania for removal of surface equipment and other materials containing PCBs. The work was completed in October 1982. In January 1983, EPA added $300,000 to design the plan for excavation of contaminated soil and its disposal off-site. The design is scheduled to be completed in mid-1983.

The Department of Justice (DOJ), on behalf of EPA, has brought a Federal civil action seeking injunctive relief and recovery of government cleanup costs from parties potentially responsible for wastes associated with the site. In May 1983, EPA obtained access to the site to perform the remaining work. This, together with the cleanup performed thus far, eliminates any need for injunctive relief. The cost-recovery action is pending until the remaining cleanup is completed.

Response category / Cleanup status code, October 1984: R F / O

LINDANE DUMP
Harrison Township, Pennsylvania

Conditions at listing (October 1981): Lindane Dump covers about 30 acres in Harrison Township, Allegheny County, Pennsylvania. About 400 tons of powdered lindane pesticide waste and other industrial waste were dumped at the site, which is privately owned. Parties potentially responsible for the wastes did a study indicating that lindane is leaching continuously from seeps at the edge of the landfill.

Status (July 1983): The State is negotiating with the potentially responsible parties for a leachate treatability study to evaluate short- and long-term treatment and disposal alternatives.

Response category / Cleanup status code, October 1984: D

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

LORD-SHOPE LANDFILL
Girard Township, Pennsylvania

Conditions at listing (October 1981): The Lord-Shope Landfill covers 4 to 5 acres in Girard Township, Erie County, Pennsylvania. About 4 million cubic feet of waste were disposed of on this privately-owned site between 1959 and 1979. Contaminants identified in ground water include chloroform, benzene, toluene, vinyl chloride, and trichloroethylene.

Status (July 1983): A party responsible for wastes at the site funded an investigation/feasibility study and undertook remedial action at the site, which is expected to be completed in summer 1983. Recently, both EPA and the State took samples of ground water, surface water, and soil. Results are due in late summer 1983.

Response category / Cleanup status code, October 1984: V S / I

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MALVERN TCE
Malvern, Pennsylvania

Conditions at listing (December 1982): The Malvern TCE Site occupies a 2-acre wooded area in Malvern, Pennsylvania. From 1952 to 1976, drums of wastes contaminated with various organic compounds, including PCBs, were dumped in pits on the site, which was owned by a solvent reclamation plant that is still in operation. Soil in the pits is contaminated with the same chemicals, and ground water in the area is contaminated with trichloroethylene and tetrachloroethylene.

Status (July 1983): The owner of the solvent reclamation plant has provided carbon filters to residents with contaminated wells, fenced the pits, and made plans to clean up the pits and ground water. The work has fallen behind schedule, and EPA and the State are re-evaluating the situation to determine what additional government action may be needed.

Response category / Cleanup status code, October 1984: D

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MCADOO ASSOCIATES
McAdoo Borough/Kline Township, Pennsylvania

Conditions at listing (October 1981): The McAdoo Associates Site consists of two areas approximately 1.3 miles apart. One, in the Borough of McAdoo, Schuylkill County, Pennsylvania, covers less than 0.2 acres. The other, in Kline Township, covers 10 acres. Waste was stored at the site between May 1978 until April 1979, when Pennsylvania revoked McAdoo's permit. Contamination of ground water, surface water, and air has been documented. The McAdoo Borough facility has four underground tanks containing hazardous subtances. The Kline Township area, used as a metal reclamation/incineration facility, consists of approximately 7,000 drums and six aboveground tanks.

This is the top priority site in Pennsylvania.

Status (July 1983): In July 1982, EPA approved $100,000 for a remedial investigation of soil and ground water to determine the type and extent of contamination at the Kline Township area. In September 1982, the owners of the site and generators responsible for the wastes voluntarily removed all surface waste. In January 1983, EPA signed a $350,000 Superfund State Contract to complete the remedial investigation and to start a feasibility study to identify alternatives for remedial actions at Kline. The work is scheduled to be completed in the first quarter of 1984.

Response category / Cleanup status code, October 1984: R

METAL BANKS
Philadelphia, Pennsylvania

Conditions at listing (December 1982): The Metal Banks Site covers 6 acres in an urban/industrial neighborhood next to the Delaware River in Philadelphia, Pennsylvania. After processing transformers and oil contaminated with PCBs there for a number of years, Metal Banks closed the operation in 1972. In 1977, EPA determined that periodic oil slicks found in the Delaware River adjacent to the site were contaminated with PCBs. The site was subsequently identified as the source of the slicks. A U.S. Coast Guard study revealed that up to 20,000 gallons of PCB-contaminated oil were in the ground water under the site and were leaking into the Delaware River.

Status (July 1983): Negotiations are in progress on a suit filed by EPA against Metal Banks in 1980. The company is currently pumping the contaminated ground water and treating it to remove the contamination.

Response category / Cleanup status code, October 1984: V F

MILL CREEK DUMP
Erie, Pennsylvania

Conditions at listing (September 1983): The Mill Creek Dump operated on a 60-acre site in Erie, Pennsylvania, from 1941 through 1981, when it was closed by the State because of illegal dumping activities. Reportedly, 1,000 to 2,000 drums containing degreasers, foundry sands, furnace slag, oils, and solvents are buried on the site. One portion of the site was once a 43-acre swamp that has been filled with foundry sands and slag, which cover much of the area. The site is located in a commercial and residential area immediately east of the Erie Airport. About 10,000 people live within 0.3 miles of the site, which is unfenced.

Investigations conducted by EPA, the State, and the County Health Department have detected contaminants, including heavy metals, solvents, and polynuclear hydrocarbons, in ground water, soil, and Marshalls Run, a stream that is adjacent to the site and flows into Lake Erie. Two municipal wells about 0.3 miles upgradient of the site are not contaminated as yet.

Status (June 1984): Late in 1983, EPA used $50,000 in CERCLA emergency funds to remove and dispose of about 100 surface drums.

EPA has prepared a work plan for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

EPA is completing the initial phases of the remedial investigation. Well drilling and environmental sampling are scheduled for mid-June 1984.

Response category / Cleanup status code, October 1984: R / O

MOYERS LANDFILL
Eagleville, Pennsylvania

Conditions at listing (December 1982): Moyers Landfill covers 50 acres near Eagleville, Montgomery County, Pennsylvania. From 1940 to 1981, it accepted an unknown quantity of municipal and industrial wastes. In May 1982, the past owner and operator of the landfill was convicted of negligently allowing leachate to discharge to Skippack Creek. Among the pollutants were metals, including lead and arsenic, and a variety of organic chemicals.

Status (July 1983): The court-appointed receiver in bankruptcy is supervising the design and construction of a leachate collection system. This system, due to be completed in the summer of 1983, is designed to control the flow of thousands of gallons of leachate from the site each day.

Response category / Cleanup status code, October 1984: R F

OLD CITY OF YORK LANDFILL
Seven Valleys, Pennsylvania

Conditions at listing (December 1982): The Old City of York Landfill covers 176 acres just outside Seven Valleys, York County, Pennsylvania. The City of York owned and operated the landfill from 1961 to 1975. In December 1981, EPA and State investigators found that the landfill was contaminating ground water in the area with volatile organic compounds. The State then advised nearby residents with contaminated wells to obtain alternate sources of drinking water or to treat their well water before drinking. The investigations also found that leachate was flowing from the landfill into the nearby Codorus Creek, which is used for fishing and other recreational activities.

In the fall of 1982, the State ordered the City of York to study the site in order to take remedial action. The city appealed the order.

Status (July 1983): The State and city are now negotiating an agreement for cleanup.

Response category / Cleanup status code, October 1984: D

OSBORNE LANDFILL
Grove City, Landfill

Conditions at listing (July 1982): Osborne Landfill covers 15 acres about 0.5 miles east of Grove City in Pine Township, Mercer County, Pennsylvania. In the 1950s, the privately-owned landfill accepted various types of industrial wastes. In 1978, the State closed the landfill for accepting industrial wastes without a permit. EPA and the State found elevated levels of a wide range of hazardous substances (including lead, arsenic, cadmium, benzene, benzo(a)pyrene, and benzo(b)fluoran) in the soil and surface water at and near the site. An adjacent swamp, which drains to a fishing stream, Swamp Run, is also contaminated. Another concern is the potential for contamination of ground water, which supplies all drinking water in the area.

Status (July 1983): As a results of negotiations with EPA and the State, Cooper Industries, Inc., which is responsible for some wastes at the site, is voluntarily fencing the site, as well as removing surface drums, other containers, and contaminated soil.

EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: V S

PALMERTON ZINC PILE
Palmerton, Pennsylvania

Conditions at listing (December 1982): The Palmerton Zinc Pile occupies about 200 acres in Palmerton, Pennsylvania, on the north slope of Blue Mountain along Aquashicola Creek. During the past 70 years, New Jersey Zinc Co.'s nearby zinc smelter deposited 33 million tons of residue, creating a cinder bank that extends for 2.5 miles and measures about 200 feet high and 500 to 1,000 feet wide. Zinc and cadmium were detected in Aquashicola Creek and nearby drinking wells. Air pollution from the smelter has also resulted in area-wide contamination, and very high concentrations of zinc and cadmium have been detected in soil and garden vegetables.

Status (July 1983): New Jersey Zinc Co. is controlling run-off from the cinder bank by placing material containing large amounts of lime at the base of the bank, which precipitates the heavy metals. The company has also graded and seeded the cinder bank to help reduce run-off.

Response category / Cleanup status code, October 1984: F

PRESQUE ISLE
Erie, Pennsylvania

Conditions at listing (December 1982): The Presque Isle Site is located in the City of Erie, Erie County, Pennsylvania. In the early 1970s, a foul-smelling, sulfur-laden, black liquid began discharging from an abandoned gas well at Presque Isle State Park. The source of the discharge was a deep underground formation, the Bass Island Formation. The color of the material and its composition indicated it was not natural to the formation. The discharge released dangerous levels of hydrogen sulfide into the air and other hazardous substances into the soil. EPA is continuing to investigate the sources of contamination in the Bass Island Formation. In the fall of 1982, the State plugged the Presque Isle well. EPA and the U.S. Geological Survey are concerned that the same material could rise in additional abandoned wells and contaminate ground water over a wide area.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine if materials similar to that discharged at the Presque Isle well can affect other wells, causing environmental or public health problems that would require remedial action.

Response category / Cleanup status code, October 1984: D

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

RESIN DISPOSAL
Jefferson Borough, Pennsylvania

Conditions at listing (December 1982): The Resin Disposal Site covers 40 acres near the Monongahela River in Jefferson Borough, Allegheny County, Pennsylvania. The privately-owned site consists of two unlined diked ponds situated in a gully between two residential areas. Between 1949 and 1964, these ponds received about 77,000 tons of industrial waste containing organic solvents, resins, and oils. Once filled, the ponds were covered with local soil. Leachate is seeping along the base of the second dike. Monitoring wells on-site and at the edge of the disposal area are contaminated by naphthalene, benzene, toluene, phenol, lead, and nickel. Leachate leaving the site is similarly contaminated.

Status (July 1983): The State is negotiating with a party potentially responsible for wastes at the site regarding collection and treatment of the leachate, a program to recover resins and solvents from the ground, and sampling of ground water.

Response category / Cleanup status code, October 1984: D

STANLEY KESSLER
King of Prussia, Pennsylvania

Conditions at listing (December 1982): The Stanley Kessler Site is in King of Prussia, Montgomery County, Pennsylvania. From 1962 to 1978, solvent wastes were disposed of via a floor drain into a septic tank-cesspool system. This practice resulted in contamination of ground water with organic compounds such as chloroform and trichloroethylene. Ground water in the area feeds the Upper Merion Reservoir, which supplies drinking water to approximately 170,000 people.

Status (July 1983): The company removed the septic tank and cesspool. EPA is negotiating with the company for complete site cleanup.

Response category / Cleanup status code, October 1984: F

TAYLOR BOROUGH DUMP
Taylor Borough, Pennsylvania

Conditions at listing (September 1983): The Taylor Borough Dump covers about 60 acres in Taylor Borough, Lackawanna County, Pennsylvania. It is near a residential area and a community park. The privately-owned site served as a municipal dump in the mid-1960s. Over 1,000 drums are piled and scattered over the surface. Records indicate materials containing hazardous substances were dumped on-site. Extensive sampling of the drums by EPA has found elevated levels of a range of metals and organic compounds. EPA has also detected organic compounds such as chloroform and trichloroethylene in the air around the drums.

Status (June 1984): Late in 1983, EPA removed the surface drums using $375,000 in CERCLA emergency funds. Approximately 253 tons of hazardous solids and 1,595 gallons of liquids were removed. In addition, security gates were erected at the access roads to prevent midnight dumping.

EPA has also begun a remedial investigation aimed primarily at defining the extent of soil contamination and determining if buried waste poses a threat to human health and/or the environment. After the remedial investigation is completed, EPA will conduct a feasibility study to determine the need for additional cleanup and, if needed, the type of cleanup measures.

Response category / Cleanup status code, October 1984: R / O

TYSONS DUMP
Upper Merion Township, Pennsylvania

Conditions at listing (September 1983): Tysons Dump is located near a residential area in Upper Merion Township, Montgomery County, Pennsylvania. The privately owned site consists of seven unlined lagoons covering about 5 acres. In the 1970s, it accepted sludges and liquid wastes, primarily chlorinated and other organic solvents, and dumped them into the lagoons. Leachate from the site flows into the nearby Schuylkill River, which provides drinking water to over 30,000 people in Norristown and other nearby communities. The State detected organic compounds in the air, which pose a potential threat to the heavily populated residential area nearby.

In March 1983, EPA used $235,000 in CERCLA emergency funds to fence the site and to construct a leachate collection and treatment system. In August 1983, EPA prepared a remedial action plan for the site.

Status (June 1984): EPA has completed a remedial investigation and is now working on a feasibility study to identify alternatives for remedial action at the site.

Response category / Cleanup status code, October 1984: R / O

VOORTMAN FARM
Upper Saucon Township, Pennsylvania

Conditions at listing (December 1982): The Voortman Farm Site in Upper Saucon Township, Lehigh County, Pennsylvania, is a sink hole 48 feet in diameter and 120 feet deep. In the mid-1970s, an estimated 10,000 battery casings were dumped on the privately-owned property. The State detected elevated concentrations of various heavy metals in the sink hole. Analyses of nearby domestic wells show heavy metals at below the maximum permissible limits.

Status (July 1983): By January 1983, inspections by the State had revealed that the battery casings were no longer in the sink hole. EPA plans to inspect the site later in 1983.

Response category / Cleanup status code, October 1984: R

WADE (ABM)
Chester, Pennsylvania

Conditions at listing (October 1981): The Wade (ABM) Site covers 3 acres on the bank of the Delaware River in Chester, Pennsylvania. The site was originally a rubber reclamation facility but has been used as an industrial waste storage and disposal facility since the early 1970s. Several thousands drums of toxic industrial waste were stored on the property, or the contents were poured directly onto the ground. In addition, thousands of gallons of waste were discharged directly from tank trailers onto the ground. The site is contaminated with toxic and carcinogenic compounds.

This site was once listed under the name "ABM-Wade."

Status (July 1983): EPA and the State have conducted a partial cleanup of this site. The State will be the lead agency for the remainder of the cleanup. The next phase will include inventorying, categorizing, and staging of waste currently on-site. This work should begin in the summer of 1983 and may take several months to complete.

EPA has reached a settlement with 34 waste generators who have agreed to contribute $1.9 million to the site cleanup. A current civil action against nine other responsible parties (other generators, transporters, and owner), seeks court-ordered cleanup and recovery of costs incurred.

Response category / Cleanup status code, October 1984: R F S / O

WALSH LANDFILL
Honeybrook Township, Pennsylvania

Conditions at listing (September 1983): The Walsh Landfill operated on an 8-acre site in Honeybrook Township, Chester County, Pennsylvania. Operations at the unpermitted site reportedly began prior to 1971 and continued until the State forced the landfill to close in 1976. The owner accepted both municipal and industrial wastes. Samples obtained by the State from on-site monitoring wells (installed by the State as part of the closure plan) contain organic compounds. Nearby residential wells sampled by the State and county are also contaminated with organic compounds.

Status (June 1984): The State and EPA have signed a Cooperative Agreement for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. Also, EPA plans to inspect the site in mid-June 1984 to determine if any immediate response is necessary.

Response category / Cleanup status code, October 1984: R

ional Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

WESTLINE SITE
Westline, Pennsylvania

Conditions at listing (December 1982): The Westline Site covers about 40 acres in Westline, McKeon County, Pennsylvania. The privately-owned site consists of a series of abandoned lagoons once used to hold sludge and other residues from a wood chemical plant that operated from the late 1800s to 1952. The lagoons have contaminated local ground water with phenol and other organic compounds. Low levels of organic compounds have also been identified in nearby Kinzua Creek.

Status (July 1983): After an investigation by EPA, the present owners of the properties on which the lagoons are located fenced the lagoons to prevent direct contact with the wastes. EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R / O

BARCELONETA LANDFILL
Florida Afuera, Puerto Rico

Conditions at listing (December 1982): The Barceloneta Landfill accepts industrial wastes on a 20-acre site in Florida Afuera, Puerto Rico. The wastes are placed in sink holes, some of which are 100 feet deep. There is no natural or artificial barrier to prevent migration of contamination. Ground water is used for municipal drinking water.

Status (July 1983): Later in 1983, EPA plans to start developing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

FIBERS PUBLIC SUPPLY WELLS
Jobos, Puerto Rico

Conditions at listing (September 1983): The Fibers Public Supply Wells serve 4,300 residents of Jobos, Puerto Rico. Two of the five wells in the field have been closed due to contamination from chlorinated solvents. One additional well with low-level contamination is still open. The U.S. Geological Survey detected the contamination in 1977 during a survey of public water wells. The source has not yet been established.

Status (June 1984): EPA is conducting a search for parties potentially responsible for wastes associated with the site.

Response category / Cleanup status code, October 1984: D

FRONTERA CREEK
Rio Abajo, Puerto Rico

Conditions at listing (December 1982): Frontera Creek in Rio Abajo, Puerto Rico, is a small creek that receives industrial waste discharges and drains into the Caribbean Sea 2 miles downstream. Adjacent to the creek are two large fresh water lagoons totalling about 640 acres. They are hydraulicly connected to the creek. EPA has found that mercury and pesticides are discharged into the creek. There is concern that these contaminants could enter the aquatic food chain, contaminating finfish, shellfish, and the endangered brown pelican. Local residents use the lagoons for fishing and recreation. The finfish and shellfish trapped in the lagoons are significant in the local diet.

The land in the immediate vicinity of the lagoon is used for agriculture (cattle, sugar cane). A community of some 100 homes is adjacent to Frontera Creek. At this time no wells are known to be used for public water or irrigation within 3 miles of the site. Access to the lagoons is limited by barbed wire fence and a security guard. However, EPA inspectors saw a number of local residents on the property during two site inspections.

Status (July 1983): Later in 1983, EPA plans to start developing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

GE WIRING DEVICES
Juan Diaz, Puerto Rico

Conditions at listing (December 1982): The General Electric Co. Wiring Devices Site in Juan Diaz, Puerto Rico, is a 5-acre facility that formerly manufactured mercury light switches. On the property is a 0.5-acre inactive open dump for off-specification products. It is possible for contaminants to erode from the dump, which is uncovered, onto a farm. The site, located in a residential area, is fenced. A small amount of debris from the dump is just outside the fence. A public water supply well is located withint 1,200 feet of the site. To date, EPA has not detected mercury in the air or well. Testing by the company for the Puerto Rico Environmental Quality Board (EQB) has found mercury in the open dump.

Status (July 1983): The company plans to clean up the site. It has hired a consultant to determine the extent of ground water and soil contamination and to present evidence that a continuous clay layer uderlies the open dump. EPA is working with EQB and the company in efforts to clean up the site.

Response category / Cleanup status code, October 1984: V F

JUNCOS LANDFILL
Juncos, Puerto Rico

Conditions at listing (December 1982): The Juncos Landfill covers 2 acres in Juncos, Puerto Rico. Thermometers containing mercury may have been dumped on the site, a closed municipal landfill. A small underground fire is burning at the landfill. A small leachate seep and soil erosion were evident during two site inspections. The site rises approximately 20 feet above grade. Of greatest concern is a new housing development built over the landfill. Although most of the homes are not yet occupied, there is concern about potential impact when they are occupied. The new community will be served from a public water supply. Soil and air contain higher-than-background concentrations of mercury. No barriers exist to prevent local residents or animals entering the site.

Status (July 1983): In February 1983, EPA conducted field studies at the site to ascertain the health hazard posed to local residents. Late in 1983, EPA plans to start developing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: V F / O

RCA DEL CARIBE
Barceloneta, Puerto Rico

Conditions at listing (December 1982): RCA Del Caribe manufactures masks for television screens on an approximately 20-acre site in Barceloneta, Puerto Rico. This process generates wastes containing chromium, selenium, and iron, which were discharged into four holding lagoons. Limestone formations below the site are highly susceptible to development of sink holes. The sink holes resulted in discharge of the contents of two lagoons into ground water. Sampling of lagoon sediments detected significant concentrations of chromium and selenium. Limited sampling of a public water well immediately downgradient of the site shows no contaminants that would be attributed to the site. Other public supply wells serving a population of 12,000 people are located within 1.5 miles of the site.

Status (July 1983): EPA is working with the Puerto Rico Environmental Quality Board and RCA to clean up the site.

Response category / Cleanup status code, October 1984: D / C

UPJOHN FACILITY
Barceloneta, Puerto Rico

Conditions at listing (September 1983): The Upjohn Site in Barceloneta, Puerto Rico, is the result of a spill of 15,300 gallons of a mixture of 65 percent carbon tetrachloride and 35 percent acetonitrile. In September 1982, a buried tank holding this mixture leaked, releasing its contents into ground water. EPA and the U.S. Geological Survey have documented contamination of ground water. A large portion of the spilled material remains in the soil. A public well serving more than 12,000 people is less than 1 mile from the site.

Upjohn has taken a number of remedial measures at the site, including (1) installing a grid of monitoring wells to define the plume of contaminated ground water; (2) installing a water line to the Puerto Rico Aqueduct and Sewer Authority supply line to Tiborones; (3) providing emergency water supplies to Garrochales; (4) cleaning, inspecting, and testing the remaining underground tanks (no other leaks were found); and (5) installing a pilot extraction plant to remove the carbon tetrachloride from the soil. Upjohn says it has already recovered 800 gallons of carbon tetrachloride from the soil by vapor extraction. Upjohn plans to install an extraction well to recover a plume containing 2,000 parts per billion of carbon tetrachloride.

Status (June 1984): EPA is currently negotiating an agreement with Upjohn to ensure that the remedial actions are completed in accordance with CERCLA requirements.

Response category / Cleanup status code, October 1984: D

VEGA ALTA PUBLIC SUPPLY WELLS
Vega Alta, Puerto Rico

Conditions at listing (September 1983): The well field supplying 28,500 residents of Vega Alta, Puerto Rico, consists of five wells. All are contaminated with chlorinated solvents. One, the Ponderosa well, was closed in January 1983 when a survey of public water wells made by the U.S. Geological Survey (USGS) detected high levels of trichloroethylene. The Puerto Rico Aqueduct and Sewer Authority is trucking and/or piping in drinking water to the residents. The source of the contamination has not been identified.

Status (June 1984): Through an Interagency Agreement with EPA, USGS plans to undertake a preliminary hydrogeological assessment of the site. The study will be integrated into a remedial investigation/feasibility study EPA is planning to identify the source(s) of contamination and alternatives for remedial action.

Response category / Cleanup status code, October 1984: R

DAVIS LIQUID WASTE
Smithfield, Rhode Island

Conditions at listing (October 1981): The Davis Liquid Waste Site occupies 10 acres near a residential area of Smithfield, Rhode Island. The site was used as a hazardous waste disposal facility until 1977, when it was closed by court order. Hazardous materials handled on the site include paint pigments, oils, halogenated and nonhalogenated solvents, acids, caustics, pesticides, phenols, and laboratory wastes. Liquid wastes in both drums and tank trucks were dumped into at least three unlined pits. Contaminated soils and wastes in drums and tanks remain on-site. Monitoring verified that both surface water and ground water are contaminated. A plume of contaminated ground water is migrating northward through highly fractured bedrock. The main point of discharge appears to be into Latham Brook.

Status (July 1983): In August 1982, EPA awarded a $336,182 Cooperative Agreement to Rhode Island for a remedial investigation to determine the type and extent of contamination at the site and for a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the fourth quarter of 1983. The next step, if approved, would be to select the cost-effective remedy and begin design activities.

The State has an enforcement action underway against the site owner.

Response category / Cleanup status code, October 1984: R S

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

LANDFILL & RESOURCE RECOVERY, INC. (L&RR)
North Smithfield, Rhode Island

Conditions at listing (December 1982): Landfill & Resource Recovery, Inc., (L&RR) occupies 36 acres in North Smithfield, Rhode Island. The area, originally a sand and gravel pit, has been used for refuse disposal since 1927. In 1969, the site began accepting solid waste for disposal. This small-scale operation was sold in 1974 to L&RR, which developed it into a large-scale facility accepting commercial, domestic, and industrial wastes. Between 1978 and September 1979, from 0.5 million to 2.0 million gallons of hazardous waste were accepted at the site. In December 1979, a plastic liner was placed over the hazardous waste to protect it from precipitation.

The L&RR Site is located in a recharge area of an aquifer with the potential to be developed for municipal drinking water. Ground water and the Slatersville Reservoir (both downgradient) are being used for drinking water. The site is bisected by a tributary of Trout Brook that drains to the Slatersville Reservoir. On-site and off-site monitoring wells show low levels of organic and metal contamination.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: V S

PETERSON-PURITAN, INC.
Lincoln/Cumberland, Rhode Island

Conditions at listing (December 1982): The Peterson-Puritan, Inc., Site covers 920 acres in the well fields of Lincoln and Cumberland, Rhode Island. Organic contamination was first detected in October 1979 in three Lincoln wells on the west bank of the Blackstone River and in a Cumberland well on the east bank of the river. These wells were closed and remain out of service. Although Lincoln received Federal funds for an alternate water supply, the town made several attempts from October 1979 through June 1980 to flush contaminants from its wells by pumping them. However, long-term pumping increased contaminant levels.

In March 1982, EPA completed a study of an area 2 miles in length along the Blackstone River, extending 2,000 feet east and west of the main channel. The northeastern corner of the site, on the Cumberland side of the river, is occupied by a small industrial area that includes Peterson-Puritan. The study concluded that Peterson-Puritan was the most probable source of contamination of the Lincoln wells and that the Cumberland well was contaminated by some of the same compounds found in the Lincoln wells.

Status (July 1983): EPA has met with Peterson-Puritan and its parent company, CPU International, Inc. Peterson-Puritan conducted an initial study to determine the source or sources of contaminants leaving its property. EPA received the report in late June 183, at which time EPA started to negotiate a Consent Decree with Peterson-Puritan for remedial action at the site.

Response category / Cleanup status code, October 1984: D

PICILLO FARM
Coventry, Rhode Island

Conditions at listing (October 1981): The Picillo Farm Site covers 7.5 acres in Coventry, Rhode Island. The area is sparsely populated. All nearby residences are served by private wells, and a large recreation reservoir is about 1.5 miles to the east. The site was discovered in 1977 when several drums containing water-reactive material exploded and started a fire. Subsequently, the State found four trenches filled with about 15,000 drums containing wastes, including solvents, oils, pesticides, PCBs, paint sludges, and explosives. There is evidence of bulk discharge of liquid chemical wastes. Air, soil, ground water, and surface water are contaminated.

In the spring of 1980, EPA began emergency removal of 10,000 buried drums from two trenches, using $560,000 provided under Section 311 of the Clean Water Act. In September 1981, EPA added $410,000 in CERCLA emergency funds.

This is the top priority site in Rhode Island.

Status (July 1983): The State completed the excavation and off-site disposal of all buried wastes in mid-1982. Since 1979, the State has spent $1.5 million on the site. EPA's Office of Research and Development spent $68,000 on a pilot study to detoxify PCBs in two large piles on-site. In February 1982, EPA awarded a $4,938,570 Cooperative Agreement to Rhode Island to (1) excavate and dispose of drums in two remaining trenches (completed in July 1982) and (2) do a remedial investigation and feasibility study to identify alternatives for cleaning up contaminated soil and ground water (to be completed in the third quarter of 1983).

The State has identified parties potentially responsible for wastes associated with the site, and litigation to recover cleanup costs is pending against them and the site owner.

Response category / Cleanup status code, October 1984: R S / 0

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

STAMINA MILLS, INC.
North Smithfield, Rhode Island

Conditions at listing (December 1982): The Stamina Mills, Inc., Site covers 50 acres in North Smithfield, Rhode Island. In 1969, to reduce water pollution from its textile weaving and finishing mill, the company adopted a solvent scouring system to replace a water/detergent system, which discharged untreated waste waters into the nearby Branch River. Spent solvents from the system were recycled in on-site stills. Oils and other contaminants removed from the fabric remained in the still bottoms, and these were deposited in an on-site landfill at a rate of about 1 barrel per day. In the early 1970s, about 800 gallons of trichloroethylene solvent spilled in the process of transferring a load from a tanker truck. Shortly thereafter, Stamina detected an odor and "sweet taste" in its drinking water and began to use bottled water. In 1974, Stamina discontinued all wet processing, including the solvent scouring system. From 600 to 700 gallons of solvent remain in storage tanks on-site. The mill was later sold. A fire in 1977 destroyed the mill, and the storage tanks could not be found. The State detected organic solvents in 41 of 53 wells in Forestdale, including a community well serving 12 homes and approximately 50 people. In 1981, EPA commissioned a hydrogeological investigation.

This site was once listed under the name "Forestdale-Stamina Mills, Inc."

Status (July 1983): The hydrogeological study concluded that the most probable source of trichloroethylene contamination of the Forestdale wells is the former Stamina Mills Site. A public water supply has been installed to serve the contaminated area. EPA is now reviewing enforcement alternatives.

Response category / Cleanup status code, October 1984: R

WESTERN SAND & GRAVEL
Burrillville, Rhode Island

Conditions at listing (October 1981): The Westen Sand & Gravel Site covers 20 acres in a rural residential area in Burrillville, Rhode Island. Originally, it was a sand and gravel quarry. From 1975 to April 1979, various liquid wastes and sewage were dumped into 12 lagoons or pits concentrated on a hill that slopes down to Tarkiln Brook. The soil is highly permeable. Organic chemicals infiltrated ground water and are flowing into Tarkiln Brook. Some private wells show low levels of contamination.

The State closed the disposal operation because nearby residents complained of odors. The quarrying operation continues. Early in 1980, the State started to remove and dispose of waste in the lagoons. In March 1980, under Section 311 of the Clean Water Act, EPA pumped and removed chemicals in four open pits at a cost of about $575,000. This was supposed to remove all major sources of contamination. The State, however, found evidence that some sludges may have been buried at the site. The State then contracted for a hydrogeological study. These actions cost the State almost $300,000.

Status (July 1983): In July 1982, EPA awarded a $292,000 Cooperative Agreement to Rhode Island for a remedial investigation to determine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the first quarter of 1984.

EPA has identified parties potentially responsible for waste associated with the site and is seeking their cooperation in the cleanup.

Response category / Cleanup status code, October 1984: R S / O

CAROLAWN, INC.
Fort Lawn, South Carolina

Conditions at listing (December 1982): The Carolawn, Inc., Site is an abandoned 3-acre waste storage and disposal facility located near Fishing Creek, west of Fort Lawn, South Carolina. Several hundred drums of chemical wastes (including acids, bases, organic solvents, and contaminated soil) were stored both outside and inside the site, which is surrounded by a chain-link fence. Also on-site was a diked lagoon filled with sludge. Heavy metals, phenols, and numerous volatile organic compounds have been detected. A significant amount of contaminated run-off from the site has migrated into a tributary of the Catawba River, which supplies drinking water for Lugaff. Air contamination affects the nearest homes, which are located 100 yards from the site.

In late 1981 and early 1982, $600,000 in CERCLA emergency funds were approved to bulk and dispose of all liquids in drums, remove remaining drums, and dispose of contaminated water from the lagoon. However, ground water is contaminated, and on-site soil may also be.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to detemine the full extent of cleanup required at the site. EPA is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R F / O

GEIGER/C & M OIL
Rantowles, South Carolina

Conditions at listing (September 1983): The Geiger Site, previously known as the C & M Oil Site, occupies about 5 acres in the small community of Rantowles, South Carolina. The site, an abandoned waste oil facility, consists of 7 unlined pits (each roughly 50 feet wide, 100 feet long, and 1 to 2 feet deep) containing about 35,000 gallons of a waste oil/water mixture. EPA analysis of the mixture indicated the presence of trichloroethane and dimethylbenzene. To the east of the pits is a pond with an outlet to the north. Run-off from the site flows through substantial hardwood swamps and estuarine marshes before emptying into Wallace River.

Status (June 1984): EPA has completed a search for parties potentially responsible for wastes associated with the site. A financial assessment of the parties is pending.

A remedial investigation/feasibility study is under consideration. It would determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: D

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/"Superfund")

INDEPENDENT NAIL CO.
Beaufort, South Carolina

Conditions at listing (September 1983): The Independent Nail Co. manufactures metallic screws on a site 3 miles north of Beaufort, Beaufort County, South Carolina. The company bought the site from Blake and Johnson in 1980. There is a 1-acre lagoon on the site into which Blake and Johnson placed waste water containing cyanide, chromium, cadmium, lead, nickel, zinc, copper, and iron. When Independent Nail bought the site, it asked Blake and Johnson to investigate the quality of ground water. In response, Blake and Johnson installed three monitoring wells of intermediate depth. Analyses revealed that ground water has been impacted by the lagoon. Further tests conducted by the State showed that the contaminated ground water has moved outside of the area covered by the monitoring wells. Surface water has been locally contaminated by the lagoon, but it is not used as a source of drinking water.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

KALAMA SPECIALTY CHEMICALS
Beaufort, South Carolina

Conditions at listing (September 1983): The Kalama Specialty Chemicals Site covers about 16 acres in a coastal environment in Beaufort, Beaufort County, South Carolina. The company is no longer in business. Its primary product was Krinite, a herbicide. Wastes present on the site include methanol bottoms, laboratory wastes, distillation bottoms, phosphorus oxychloride, phosphorus trichloride, xylene wastes, Krinite wastes, spent oil, and methyl methacrylate. On-site is a lagoon that at one time overflowed into a tile field. In January 1979, an explosion of one of the reactors caused extensive spilling of various organic chemicals. State data indicate that the explosion, as well as the tile field operation, has contaminated shallow ground water with lead, benzene, ethyl benzene, and toluene. The site is in the recharge zone of a primary aquifer. State analytical data also indicate surface water is contaminated with the same chemicals. In January 1980, the State issued a Consent Order requiring the company to (1) upgrade a treatment system on the site and (2) develop a plan to study ground water.

Status (June 1984): In accordance with an amended Consent Order, the company has submitted a proposal to the State for a study of ground water and soil contamination.

Response category / Cleanup status code, October 1984: 8

KOPPERS CO., INC. (FLORENCE PLANT)
Florence, South Carolina

Conditions at listing (September 1983): Koppers Co., Inc., treats and preserves wood with creosote and pentachlorophenol on a 20-acre site in Florence, Florence County, South Carolina. The company has had numerous difficulties in the past with contaminated run-off. The primary problem at this site, however, is an old evaporation lagoon closed since 1979. It has led to contamination of six of nine monitoring wells on-site, according to company data. The State has detected contamination in private wells off-site. At least 1,200 people use the shallow aquifer for drinking water. Surface water contamination has not been documented to date. In October 1981, the State issued a Consent Order requiring the company to conduct a ground water study.

Status (June 1984): The State is reviewing the company's response to an amended Consent Order which calls for the company to (1) complete installation of a monitoring well, (2) report on the progress of a sampling program, (3) submit a hydrological report, and (4) submit a plan for remedial action.

Response category / Cleanup status code, October 1984: S

LEONARD CHEMICAL CO., INC.
Rock Hill, South Carolina

Conditions at listing (September 1983): Leonard Chemical Co., Inc., stored wastes and disposed of process residues (mainly distillation bottoms and chemical wastes) on a 7-acre site in Rock Hill, York County, South Carolina. About 3,400 drums and 11,500 gallons of various chemical wastes in surface tanks were stored on the site. Numerous spills and leaks have occurred, threatening ground water. The State ordered Leonard Chemical to install three monitoring wells at the site. The company's data indicate low levels of organic contamination in a shallow aquifer. In May 1983, a group of generators, in response to a State Consent Order, retained a contractor to remove surface wastes from the site. The operation was completed in June 1983. However, due to low estimates in the generators' bid proposal, not all of the surface wastes were removed.

Status (June 1984): The generators of wastes at the site have voluntarily moved more than 80 percent of the waste. The State is negotiating a Consent Order to complete the cleanup.

Response category / Cleanup status code, October 1984: S / O

PALMETTO WOOD PRESERVING
Dixianna, South Carolina

Conditions at listing (September 1983): Palmetto Wood Preserving occupies about 10 acres in Dixianna, Lexington County, South Carolina. Since about 1980, the company's process of pressure treating lumber has resulted in excess chromated copper arsenate solution being drained to the ground. The shallow aquifer, which supplies drinking water to some 1,000 to 2,000 people, has been contaminated. The State has detected high levels of chromium in nearby private wells. Surface water contamination has not been documented to date.

Status (June 1984): Under a State Consent Order, the company implemented a monitoring plan in late 1983.

Response category / Cleanup status code, October 1984: D

SCRDI BLUFF ROAD
Columbia, South Carolina

Conditions at listing (October 1981): The South Carolina Recycling and Disposal, Inc. (SCRDI) Bluff Road Site is on State Highway 48 (Bluff Road) about 7 miles southeast of downtown Columbia, South Carolina. The property covers about 7 acres, of which 2 acres are actually used for waste storage. About 7,200 drums of toxic, flammable, and reactive wastes are on-site, as well as numerous smaller containers. Two small ponds at the northern end of the site are remnants of lime slurry disposal ponds used by an acetylene manufacturer that once occupied the property. The storage area is partially fenced. Air, ground water, and surface water are contaminated.

This is the top priority site in South Carolina.

Status (July 1983): During early 1982, a group of generators contracted with one of the generators, TRI, Inc., to clean up 75 percent of the surface of the site at a cost of $1.6 million. The cleanup was completed in late 1982. In June 1982, EPA awarded a $1,078,292 Cooperative Agreement to South Carolina to clean up the remaining surface waste and conduct a remedial investigation and feasibility study for cleanup of ground water. In August 1982, EPA approved $100,000 for remedial design activities. The surface cleanup is scheduled to be completed in the third quarter of 1983, and the feasibility study in the third quarter of 1984.

The Department of Justice, on behalf of EPA, has brought a Federal civil action against those generators who failed to participate in the surface cleanup by TRI.

Response category / Cleanup status code, October 1984: V R F / O

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/"Superfund")

SCRDI DIXIANA
Cayce, South Carolina

Conditions at listing (July 1982): The South Carolina Recycling and Disposal, Inc. (SCRDI) Dixiana Site covers 2 acres near Cayce, South Carolina. At one time, the site contained over 1,100 drums of materials such as paints, solvents, acids, waste oils, phenols, and dyes. In August 1978, the State filed a suit against the site owners. The resulting court order specified that the site no longer receive wastes and that the wastes on-site be contained. In May 1980, as a result of SCRDI's failure to contain the wastes, a State court found SCRDI in contempt, which resulted in the company being placed in receivership. Shortly thereafter, SCRDI removed all drums and some contaminated soil.

As a result of spillage of a dye (a suspected carcinogen), shallow ground water is contaminated, and the State advised two families living nearby not to use their well water.

Status (July 1983): Conditions at this site are currently being addressed through a State enforcement action against parties responsible for wastes at the site.

Response category / Cleanup status code, October 1984: R F S / O

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/"Superfund")

WAMCHEM, INC.
Burton, South Carolina

Conditions at listing (September 1983): Until the late 1970s, Wamchem, Inc., synthesized organic chemicals and formulated color concentrates on 200 acres in Burton, Beaufort County, South Carolina. It disposed of its wastes (including phenols, lead, cadmium, and solvents) in an evaporation lagoon. Then it switched to spraying its wastes onto two fields. State monitoring of wells on-site has detected lead, chromium, toluene, dichloronitroethane, and benzene. Some 1,000 to 2,000 people get drinking water from the shallow aquifer within 3 miles of the site. Surface water is contaminated with the same chemicals, but it does not supply drinking water at this time.

Status (June 1984): The company is conducting further ground water studies to determine the impact of the spray fields and disposal lagoon.

Response category / Cleanup status code, October 1984: D

WHITEWOOD CREEK
Whitewood, South Dakota

Conditions at listing (October 1981): Over 100 years worth of gold mining and mill tailings have discharged into approximately 20 miles of Whitewood Creek near Whitewood in the Black Hills area of South Dakota. Heavy metals contaminate soil, ground water, and surface water.

This is the top priority site in South Dakota.

Status (July 1983): Under a voluntary agreement, EPA, the State, and Homestake Mining Co., which has operated in the area, are proceeding with a remedial investigation along the contaminated segment of the creek. The investigation will identify the location and condition of tailings materials, the existence and forms of the contaminants, and the potential for human health or environmental problems. The work is scheduled to be completed in the fourth quarter of 1984.

Response category / Cleanup status code, October 1984: V

AMNICOLA DUMP
Chattanooga, Tennessee

Conditions at listing (December 1982): Amnicola Dump covers 18 acres, with 12 acres filled, near the Tennessee River in Chattanooga, Tennessee. It was operated by the city as a municipal dump (on private property) from 1970 to 1973. Primarily brush and demolition wastes were disposed of, but some industrial wastes were accepted as well. When the site closed, it was covered, graded, and revegetated.

Seasonal leachate streams containing low concentrations of trichloroethylene leave the site and enter the adjacent Tennessee River. To date, water quality downstream has not been affected, but it will need to be carefully monitored.

Status (July 1983): The State is monitoring water quality near the site.

Response category / Cleanup status code, October 1984: D

GALLAWAY PITS
Gallaway, Tennessee

Conditions at listing (December 1982): The Gallaway Pits cover 10 acres near Gallaway, Tennessee. They are a series of old gravel pits used for unpermitted dumping of municipal and industrial wastes. Illicit dumping of pesticide-containing wastes was discovered in 1981. In February 1982, the State ordered dumping to stop. The responsible party failed to comply with a State-ordered cleanup. The types and quantities of waste at this site, principally pesticides, indicate a potential for ground water contamination, although State samples from residential wells in the area show no contamination. While the waste material appears to be contained in the ponds, any migration could pass through the underlying sand and gravel and enter the aquifer.

Status (July 1983): EPA is considering an emergency action to deal with the most highly contaminated areas and a remedial investigation/ feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R F/O

LEWISBURG DUMP
Lewisburg, Tennessee

Conditions at listing (December 1982): The Lewisburg Dump covers 20 acres in Lewisburg, Tennessee. For 20 to 25 years until it officially closed in 1979, it was Lewisburg's municipal dump. It also accepted industrial wastes, including inorganics and solvents. The dump partially filled a former limestone quarry that contains a lagoon fed by ground water. There is a potential for ground water contamination. Run-off enters an unnamed tributary to Big Creek, but sampling shows no contamination to date.

Status (July 1983): The State is working with Lewisburg to control access to the site to eliminate illicit dumping and also to provide for routine monitoring.

Response category / Cleanup status code, October 1984: D

National Priorities List Site

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/"Superfund")

MURRAY-OHIO DUMP
Lawrenceburg, Tennessee

Conditions at listing (December 1982): The Murray-Ohio Dump near Lawrenceburg, Tennessee, has been receiving company wastes since 1964, including electroplating sludge and paint wastes. Ground water beneath the site and a tributary of Shoal Creek are contaminated with chromium.

Status (July 1983): The State is trying to bring the site into compliance with the Tennessee Hazard Waste Management Act, although no deadline for compliance has been set.

Response category / Cleanup status code, October 1984: S

NORTH HOLLYWOOD DUMP
Memphis, Tennessee

Conditions at listing (October 1981): North Hollywood Dump occupies 100 acres in the floodplain of the Wolf River in Memphis, Tennessee. It received municipal and industrial wastes from 1930 to 1967, when it was closed by the city. Pesticide-related compounds and heavy metals have been detected on the site. Nearby soils and surface water are contaminated, and there is a potential for ground water contamination.

In March 1980, using $215,000 made available under Section 311 of the Clean Water Act, EPA took emergency action to reduce run-off from the site. In addition, a fence was put up and a monitoring program started. In February 1981, the Technical Action Group (TAG), consisting of representatives from the State, the City of Memphis, Shelby County, local industry, and EPA, removed some of the chemical wastes from the surface.

In March 1981, EPA approved $184,000 for a remedial investigation to determine the type and extent of contamination at the site and to initially screen alternatives for remedial action. This amount was matched by the non-Federal parties to IAG.

This is the top priority site in Tennessee.

Status (July 1983): The remedial investigation is scheduled to be completed in the fourth quarter of 1983.

Response category / Cleanup status code, October 1984: R S

VELSICOL CHEMICAL CORP. (HARDEMAN COUNTY)
Toone, Tennessee

Conditions at listing (December 1982): Velsicol Corp's Hardeman County Dump, near Toone, Tennessee, accepted the company's process wastes in the 1960s and 1970s. Detection of organic contaminants in local wells in 1978 resulted in extensive sampling and geological and hydrogeological assessments. Velsicol capped the site and agreed to monitor until December 1983 to determine the effectiveness of the action.

Status (July 1983): When the monitoring period ends, Velsicol, the State, and EPA will review the effectiveness of the cap. Any additional measures to control the site will be discussed at that time, as well as the possible need for decontaminating area ground water.

Response category / Cleanup status code, October 1984: D

BIO-ECOLOGY SYSTEMS, INC.
Grand Prairie, Texas

Conditions at listing (October 1981): The Bio-Ecology Systems, Inc., Site covers 11.2 acres in a floodplain in Grand Prairie, Dallas County, Texas. The site was used for incineration, chemical treatment, biological oxidation of waste waters, and landfilling of solids resulting from treatment processes. The site operated from June 1972 thorugh June 1978, when Bio-Ecology filed for bankruptcy. The State recovered available assets from the company and spent them for a limted site closure. Wastes present at the site include mixed oils, solvents, and ketones (all in tanks) in addition to buried chromium, cyanide, and heavy metal sludges. Shallow ground water is contaminated.

Status (July 1983): In April 1982, EPA awarded a $328,000 Cooperative Agreement to Texas for a remedial investigation to determine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action. In March 1983, EPA added $29,090 to the award. The work is scheduled to be completed in the third quarter of 1983. EPA is also moving forward with plans for an initial remedial measure at the site to remove the tanks. A Superfund State Contract for $200,000 is being negotiated.

Response category / Cleanup status code, October 1984: R / O

CRYSTAL CHEMICAL CO.
Houston, Texas

Condition at listing (July 1982): Crystal Chemical Co. started to produce arsenic-based pesticides on a site in Houston, Harris County, Texas, in 1968. During plant operations, containers of both raw and finished materials were stored in the open on the ground. The materials subsequently spilled and leaked into the soil. Arsenic materials spread outside of the process areas in June 1976 when rain caused waste water ponds to overflow. In 1980, the State issued Crystal a "no discharge order." Crystal responded by building a dike around the plant and took other remedial actions. However, when EPA imposed a civil penalty of $112,600 for violations of the Resource Conservation and Recovery Act, Crystal determined that taking corrective action to prevent further incidents would be too expensive. Crystal declared bankruptcy in October 1981.

Status (July 1983): Between September 1981 and late 1982, EPA used $276,000 in CERCLA emergency funds to: (1) dewater the site, (2) fill in the ponds with contaminated soils, (3) temporarily cap most of the plant site with 6 inches of clay, and (4) add topsoil and seed.

In November 1982, EPA awarded a $369,900 Cooperative Agreement to Texas for a remedial investigation to determine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the second quarter of 1984. In September 1983, EPA filed with the bankruptcy court to recover Federal funds expended at the site.

Response category / Cleanup status code, October 1984: R F / O

FRENCH, LTD.
Crosby, Texas

Conditions at listing (October 1981): The French, Ltd., Site is an abandoned waste pit on 15 acres in Crosby, Harris County, Texas. It is in the floodplain of the San Jacinto River and has been flooded on several occasions. The site received approximately 100,000 barrels of industrial waste per year between 1966 and 1972. Wastes included heavy metals, phenols, PCBs, oil, grease, acids, and solvents. During litigation with the State over violation of environmental law, the company declared bankruptcy and deeded the site to the State in 1973. No wastes have been disposed of at the site since then. The pit is located in permeable sands, and ground water is contaminated, as well as adjacent drainage ditches which discharge to the San Jacinto River. Low levels of contamination were measured in the air in the immediate vicinity of the pit.

Status (July 1983): In April 1982, EPA awarded a $437,000 Cooperative Agreement to Texas for a remedial investigation to detemine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the fourth quarter of 1983. In March 1983, EPA added $29,668 to the award.

In June, using about $83,000 in CERCLA emergency funds, EPA removed PCB-contaminated sludge from the pit and sent it to an approved landfill for disposal.

Response category / Cleanup status code, October 1984: R F / O

GENEVA INDUSTRIES/FUHRMANN ENERGY CORP.
Houston, Texas

Conditions at listing (September 1983): The Geneva Industries/ Fuhrmann Energy Corp. Site covers 13 acres in Houston, Texas. It is an abandoned petrochemical manufacturing and reprocessing facility. Five companies have owned the site since it began operation in 1970. The present owner (Fuhrmann) is salvaging the remaining equipment on-site. At least one of the previous owners used the facility to manufacture chlorinated biphenyls, PCBs, and phenoxy phenol. State and county officials have cited previous and/or present owners for permit violations, spills, and discharges.

EPA and State testing has confirmed contamination of the shallow aquifer with PCBs, xylene, and other organic compounds, and releases of PCBs in surface run-off to an adjacent flood control channel.

In June 1983, using $75,000 in CERCLA emergency funds, EPA fenced an area adjacent to the site where drums had been buried and tested an abandoned chlorine tank, which was confirmed to be empty.

Status (June 1984): In February 1984, EPA removed deteriorating drums, PCB-contaminated waste piles, waste water from lagoons and tanks, and 3,800 tons of PCB-contaminated sludge, soil, and sediments from the site. Lagoons and ponds were backfilled and capped, and a diked tank area was stabilized and capped. Cost of the project was $1.6 million in CERCLA emergency funds.

The State and EPA have signed a Cooperative Agreement covering a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. On-site field work began June 18, 1984.

Response category / Cleanup status code, October 1984: R F / O

HARRIS (FARLEY STREET)
Houston, Texas

Conditions at listing (July 1982): The Harris (Farley Street) Site, an abandoned landfill containing tars and sludges, is located in Houston, Harris County, Texas. Records indicate that a transporter leased the site in 1958 and disposed of over 550 tons of liquids and sludges from local chemical industries in two trenches, each 120 by 40 feet. Following complaints, a thin layer of soil was placed over the disposal area. Subsequent owners discovered the waste as it migrated into a swimming pool and appeared in other construction activity. Air, soil, ground water, and surface water are contaminated with organic chemicals. All residents in the immediate area depend on ground water for drinking water.

Status (July 1983): In November 1982, EPA awarded a $325,563 Cooperative Agreement to Texas for a remedial investigation to determine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the second quarter of 1984.

In January 1983, EPA was notified that parties potentially responsible for wastes at the site had declined to participate in the remedial investigation and feasibility study. The potentially responsible parties will again be notified of the opportunity to participate in the next phase of remedial activities, prior to the design phase.

In June 1983, EPA and Dow Chemical, U.S.A., signed an Administrative Order on Consent. Dow will investigate possible contamination of soil, surface water, and ground water and develop any remedial alternatives that may be necessary.

Response category / Cleanup status code, October 1984: V

HIGHLANDS ACID PIT
Highlands, Texas

Conditions at listing (July 1982): The Highlands Acid Pit is located on the bank of the San Jacinto River in Highlands, Harris County, Texas. The 18-acre site appears to be an excavated sand pit in which spent sulfuric acid sludges from an unknown chemical process were dumped in the early 1950s. The highly acid sludge contains heavy metals and organic chemicals. Strong odors emanate from the site during hot dry weather. Contaminants have been discovered in run-off as well as in ground water at the site. The area is subsiding, and portions of the property are under water.

Status (July 1983): In September 1982, EPA awarded a $402,864 Cooperative Agreement to Texas for a remedial investigation to determine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the first quarter of 1984.

Response category / Cleanup status code, October 1984: R

MOTCO, INC.
La Marque, Texas

Conditions at listing (October 1981): The Motco, Inc., Site known originally as Petro Processors Site No. I, is located near La Marque, Galveston County, Texas. It consisted of seven unlined open pits on 11 acres of flat coastal plains near Galveston Bay. The site, opened in 1959 to reclaim styrene tars, was devastated in 1961 by Hurricane Carla. For several years thereafter, it was used for waste disposal by independent haulers. One pit originally was used to receive a wide variety of wastes. The others were used to reclaim waste oils. Both organic and inorganic (cooper, mercuric chloride, elemental mercury, and lead) waste was received at the site. Surface water, ground water, and air are contaminated. The site had a State permit to operate a series of "salvage ponds" between 1964 and 1968, when the city restricted open pit disposal. Motco, Inc., attempted to recycle wastes at the site from 1974 to 1976, when it went bankrupt. The site then went into receivership.

In 1980, and again in 1981, the Coast Guard, with EPA assistance, undertook emergency cleanups at the site, funded by $450,000 made available under Section 311 of the Clean Water Act. About 100 drums were removed, over 5 million gallons of wastes in the pit were treated and discharged, the dikes were reinforced, and the site was fenced. In mid-1981, using $421,000 made available under the Resource Conversation and Recovery Act, EPA started a remedial investigation to determine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action.

This is the top priority site in Texas.

Status (July 1983): The remedial investigation is complete, and the feasibility study is scheduled to be completed in the third quarter of 1984. In February 1983, $52,418 in CERCLA emergency funds were used to treat and discharge 2 million to 3 million gallons of contaminated liquids, providing 25 feet of free board. In June 1983, EPA signed a Superfund State Contract with Texas for an initial remedial measure involving removal of the tanks and their contents.

Response category / Cleanup status code, October 1984: R / O

SIKES DISPOSAL PITS
Crosby, Texas

Conditions at listing (October 1981): The Sikes Disposal Pits are located on a 40-acre site in Crosby, Harris County, Texas, in the floodplain of the San Jacinto River. The entire area has flooded twice in the recent past. During the late 1960s and early 1970s, the site owner dumped unsegregated chemical wastes from area petrochemical companies into four major pits. A large number of drums are on the site. Chromium and various organic chemicals have been identified. A large area of sludge extends eastward from the site and flows into the San Jacinto River bottom lands. Surface waters are contaminated, and ground water is suspected of being contaminated.

Status (July 1983): In June 1982, EPA awarded a $476,000 Cooperative Agreement to Texas for a remedial investigation to determine the type and extent of contamination at the site. In March 1983, EPA entered into an interagency agreement with the Federal Emergency Management Agency and awarded $30,000 to relocate the Sike family. The relocation was completed in early May. In March 1983, EPA added $19,078 to the Cooperative Agreement. The work is scheduled to be completed in the fourth quarter of 1983. In June 1983, EPA used $36,164 in CERCLA emergency funds to remove sands and phenolic wastes from the site.

Response category / Cleanup status code, October 1984: R F / O

TRIANGLE CHEMICAL CO.
Bridge City, Texas

Conditions at listing (December 1982): Triangle Chemical Co. produced antifreeze, windshield wash solvent, industrial cleaning compounds, hand cleaners, and brake fluids on a 4.5-acre in Bridge City, Orange County, Texas. Operations started in the early 1970s. In 1981, the company discontinued operations, declared bankruptcy, and abandoned the facility. About 900 drums and several large tanks of hazardous substances were left at the facility. In April 1982, using $8,082 in CERCLA emergency funds, EPA fenced the site. In August 1982, using $74,755 in CERCLA emergency funds, EPA removed the drums and some contaminiated soil and sent them to an approved disposal site. A cost recovery action has been filed with the bankruptcy court.

Status (July 1983): Conditions at the site are currently being addressed through response actons funded by CERCLA, as well as by an enforcement action against parties potentially responsible for waste at the site.

Response category / Cleanup status code, October 1984: R F / O

UNITED CREOSOTING CO.
Conroe, Texas

Conditions at listing (September 1983): United Creosoting Co. operated a wood-preservation facility prior to 1975 on a 50.7-acre site in Conroe, Montgomery County, Texas. The original site was subdivided and later sold to Conroe Construction Co., Clarke Bottling Co., and developers of Tanglewood East Subdivision.

Aerial photographs dated 1958, 1968, 1975, and 1979 show the sequence of events from the wood-treating operations to abandonment and then redevelopment. The photos clearly outline the boundary of two ponds used in the wood-preservation process. The major portion of the larger pond lies on property now owned by Clarke Bottling Co. A portion of the pond appears to be under several lots of a new subdivision.

EPA has identified pentachlorophenol and toluene in the pond. Ground water is contaminated with naphthalene, methylene naphthalene, and dibenzofuran. Run-off from contaminated areas moves through Tanglewood Subdivision to the west.

Status (June 1984): In January 1984, Clarke Distributing Co., under an Administrative Order by EPA, constructed a clay cap and drainage diversion berms to mitigate the run-off problem. EPA has awarded a Cooperative Agreement to the State for a remedial investigation/ feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Soil sampling in December 1983 indicated levels of dibenzo-p-dioxins of the octa, hepta, and hexa varieties. These were further analyzed for three isomers of the hexa variety. The laboratory reported only the presence of the 123678 isomer at a range of 0.7 to 3.7 parts per billion. Dust samples from homes were taken March 12, 1984, and analyzed for pentachlorophenol (PCP) and three isomers of the hexa variety dioxin under a sampling plan coordinated with the U.S. Centers for Disease Control. The interior samples indicated the presence of up to 1 part per million PCP and no detectable levels of dioxin.

Response category / Cleanup status code, October 1984: V R / C

PCB WASTES
Trust Territory of the Pacific Islands

Conditions at listing (October 1981): The Trust Territory of the Pacific Islands (Palau, Yap, Truk, Ponape, Kosrae, and Majuro) has areas for storing transformers contaminated with PCBs. The storage sites, which hold more than 2,000 gallons of wastes, are unprotected and could contaminate ground water and surface water used as drinking water. Contamination of marine resources used for food could also result. Wastes migrating from some of these sites may already have contaminated the surrounding area.

This is the top priority site in the Trust Territory.

Status (July 1983): In July 1982, EPA approved $75,000 for studies of four sites--Ordot Landfill, PCB Wastes, PCB Warehouse, and Taputimu Farm--located on islands of the Insular Territories. Another $65,000 were added in November 1982. The funds are for two separate projects. One is to review and compile existing data for the Ordot Landfill, where ground water and surface water may be threatened by hazardous wastes mixed in with municipal wastes. The second is for the other three sites, where wastes are containerized. The funds are for a remedial investigation to determine the type and extent of contamination at each site and a feasibility study to identify alternatives for remedial action. The work is scheduled to be completed in the third quarter of 1983. The next step, if approved, would be to select the cost-effective remedy and begin design activities. In January 1983, EPA awarded $10,000 to the U.S. Army Corps of Engineers for technical assistance to the project.

Response category / Cleanup status code, October 1984: R / C

ROSE PARK
Salt Lake City, Utah

Conditions at listing (October 1981): The Rose Park Sludge Pit covers 5 acres in Salt Lake City, Utah. It was used for the disposal of petroleum wastes from the 1920s until 1957. Sludges were placed into unlined pits and sometimes covered with lime and soil. The site has been fenced, but park users can directly contact sludge exposed at the site.

This is the top priority site in Utah.

Status (July 1983): EPA, the State, the city, and Amoco (which had purchased the company that deposited the wastes on the site) reached an agreement for cleanup. Amoco constructed a slurry wall and will construct a clay cap to isolate the sludge. Construction of the clay cap is scheduled for completion in July 1983. Amoco and Salt Lake City each contributed $45,000 to pay for ground water monitoring around the outside of the slurry wall for 30 years.

Response category / Cleanup status code, October 1984: V

OLD SPRINGFIELD LANDFILL
Springfield, Vermont

Conditions at listing (December 1982): The Old Springfield Landfill, in Springfield, Vermont, is on a terrace above and 0.3 miles west of the Black River. On the 80-acre site now are a trailer park and a few homes. From 1946 to 1968, the privately-owned site was the principal disposal place for Springfield's domestic and industrial wastes, including wastes oils, solvents, paint sludges, plating and etching wastes, and strong acids. Leachate flows to the Black River and Seaver Brook. Neither is used as a drinking water source. Of 10 private drinking wells tested in the immediate area, one had low levels of volatile organics and two had metals. Metal contamination in two private wells has been determined to cause no immediate health risk, but has rendered the water aesthetically undrinkable. Alternative water supplies have been suggested for the one residence with a well contaminated by organics.

Status (July 1983): The State is monitoring the residential wells in the area on a quarterly basis.

EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: V R F / O

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

PINE STREET CANAL
Burlington, Vermont

Conditions at listing (October 1981): The Pine Street Canal Site covers 30 acres of partially filled wetland bordering an abandoned shipping canal (Pine Street Canal) and Lake Champlain in Burlington, Vermont. In 1906, a coal gasification plant began operating on Pine Street, southeast of the canal. There is evidence that residual oil and wood chips saturated with organic compounds were disposed of in the Pine Street Canal wetland. During the 1960s and early 1970s, and oil-like material was detected seeping from the wetland into Pine Street Canal, Barnes Basin, and Maltex Pond. The State detected high levels of organic compounds associated with coal tar at several locations on the site, which is along the proposed location of a portion of a major highway. The State is concerned that construction will release organic compounds to the canal and possibly to Lake Champlain, the source of Burlington's drinking water.

This is the top priority site in Vermont.

Status (July 1983): EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. At the same time, it is searching for parties potentially responsible for wastes associated with the site.

Response category / Cleanup status code, October 1984: V/I

CHISMAN CREEK
York County, Virginia

Conditions at listing (October 1981): The Chisman Creek Site covers 27 acres in a suburban area of York County, Virginia. From about 1957 to 1980, fly ash from a nearby power station was dumped on the site in a series of pits adjacent to Chisman Creek. In 1980, nearby shallow residential wells became contaminated with vanadium and could no longer be used. The homes now must use public water.

Status (July 1983): The Virginia Institute of Marine Sciences has studied contamination at the site and is expected to release its draft report shortly.

Response category / Cleanup status code, October 1984: R

MATTHEWS ELECTROPLATING
Roanoke County, Virginia

Conditions at listing (October 1981): The Matthews Electroplating Site is 4 miles west of Salem, in Roanoke County, Virginia. An electroplating plant operated at the 1.7-acre site from 1972 to 1977. The plant's process wastes contaminated local ground water with chromium. There is no public water supply in the area, and residents rely on wells for drinking water. The property was purchased by the current owner in 1977. Under an agreement with the State Water Control Board, the owner took several steps to control the flow of rain water and storm run-off through the contaminated portion of the site. The ground water remains contaminated, however, and there is evidence that the plume of contamination is spreading.

This is the top priority site in Virginia.

Status (July 1983): In November 1981, $340,000, made available under the Resource Conservation and Recovery Act, was approved for a remedial investigation to determine the extent and type of contamination at the site and a feasibility study to identify alternatives for remedial action. The work was completed in January 1983. The cost-effective remedy has been tentatively selected, and a Superfund State Contract for cleanup is in the final stage of negotiation.

Response category / Cleanup status code, October 1984: R

SALTVILLE WASTE DISPOSAL PONDS
Saltville, Virginia

Conditions at listing (December 1982): The Saltville Waste Disposal Ponds Site consists of two ponds adjacent to the North Fork of the Holston River, at Saltville, Smyth County, Virginia. Between 1951 and 1972, chlorine and caustic soda were produced at a plant near the ponds. Although the plant itself has been demolished, the ponds remain, holding approximately 11 million tons of mercury-contaminated waste. Discharges from past operation of the plant and leachate from the ponds have contaminated 50 miles of the North Fork of the Holston River with mercury. Since September 1970, this portion of the river has been closed to fishing for eating purposes (game fishing is allowed on a "catch and release" basis).

A task force comprised of EPA (Region III), Virginia State Water Control Board, Tennessee Valley Authority, and the Tennessee Department of Public Health was organized in 1979 to study the mercury contamination problem. Several steps have already been taken under a State order to stop discharges from the waste ponds, and portions of the river were dredged in 1982 to remove mercury-contaminated sediments.

Status (July 1983): The river is being monitored to measure the effectiveness of the cleanup measures.

Response category / Cleanup status code, October 1984: R

U.S. TITANIUM
Piney River, Virginia

Conditions at listing (December 1982): The U.S. Titanium Site covers 80 acres near the village of Piney River, Nelson County, Virginia. Between 1931 and 1971, a mine and ore-refining plant at the site produced titanium dioxide for paint pigments. About 80,000 cubic yards of acidic wastes from the ore-refining process were left at the site when the plant closed. Storm run-off from this waste caused several large fish kills in the Piney River in the late 1970s. In 1980, the acidic wastes were removed from the original exposed location and buried in a clay-lined cell. In the summer of 1982, the State completed a grading and revegetation project at the site.

Status (July 1983): Although the recent work has improved conditions at the site, acidic run-off still threatens the Piney River. EPA recently completed a draft remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

The State is currently pursuing an enforcement action against the present and former owners of the site.

Response category / Cleanup status code, October 1984: F S

AMERICAN LAKE GARDENS
Tacoma, Washington

Conditions at listing (September 1983): In January 1983, a resident of American Lake Gardens in Tacoma, Washington, complained to EPA about family health problems, which she blamed on bad drinking water. She claimed that contamination resulting from disposal practices at McChord Air Force Base, which borders her property on three sides, were polluting her wells. EPA and the Tacoma-Pierce County Health Department found high levels of iron, trichloroethylene, and 1,2-transdichloroethylene in her wells. Subsequent sampling identified several more contaminated wells nearby. In all, 20 of the 57 wells in American Lake Gardens were tested. The Health Department advised owners of several wells serving about 25 people to use bottled water.

Because of the discovery of this well contamination, plus the contamination of two large public wells adjacent to another part of McChord, the Air Force accelerated its Installation Restoration Program at the base. As part of this effort, the Air Force has sampled existing wells on-site, drilled a number of monitoring wells, and reviewed records of disposal practices and spills on the base. However, the information covering the area adjacent to American Lake Gardens is incomplete EPA is now drilling four monitoring wells along the boundary of the most contaminated property and will drill up to six additional wells to determine the extent of contamination and to locate the source. The Air Force has agreed to drill at least two monitoring wells on the base to help locate the source and to continue its general investigation of ground water contamination.

Status (June 1984): EPA drilled and sampled eight monitoring wells in American Lake Gardens and sampled three monitoring wells constructed by the Air Force on adjacent property. The lab results showed contamination of the American Lake Gardens wells to be coming from McChord Air Force Base. Accordingly, on March 1, 1984, EPA turned the site investigation over to the Air Force. The Air Force has agreed to perform a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. The Air Force is now providing bottled water to American Lake Gardens' residents dependent on contaminated wells. In addition, the Air Force recently sampled approximately 20 wells in the subdivision and constructed several additional monitoring wells on the McChord Air Force Base.

Response category / Cleanup status code, October 1984: V / O

COLBERT LANDFILL
Colbert, Washington

Conditions at listing (December 1982): The Colbert Landfill, owned and operated by Spokane County, is located in Colbert, 10 miles north of Spokane, Washington. For 5 years, the 40-acre landfill accepted liquid solvent wastes and buried them in unlined pits in permeable soil. The surrounding rural area depends on nearby ground water for drinking water and irrigation. No alternative supply is readily available. Some wells are contaminated by the same organic solvents that were dumped at the landfill, which continues to accept municipal wastes.

In September 1981, EPA awarded an $80,000 Cooperative Agreement to the State, using funds available under the Resource Conservation and Recovery Act, for a remedial investigation to determine the source of ground water contamination. The work was completed in July 1982.

Status (July 1983): Among options being considered for the future are: capping the landfill, conducting long-term monitoring studies of ground water, and providing alternative water supplies to those families using contaminated wells.

Response category / Cleanup status code, October 1984: R / O

COMMENCEMENT BAY, NEARSHORE/TIDEFLATS
Pierce County, Washington

Conditions at listing (October 1981): The Commencement Bay, Nearshore/Tideflats Site covers about 16 acres in Pierce County around Tacoma, Washington. The area is heavily industrialized and includes a copper smelter, pulp mill, and several chemical industries. About 50,000 people live nearby. High levels of arsenic and aluminum are found in soils in heavily populated residential areas, and high levels of arsenic have been found in the urine of nearby school children. A wide range of pollutants is found in the waterways of the tideflats. The land is predominantly privately owned, although a port authority is on-site, and an Indian tribe claims much of the area. The extent of past versus ongoing contamination is unknown.

This is one of two Commencement Bay sites. They were considered one site when they were first proposed.

Status (July 1983): In April 1983, EPA awarded a $1,357,751 Cooperative Agreement to Washington for a remedial investigation to determine the type and extent of contamination at the site. The work is scheduled to be completed in the first quarter of 1985. In addition, EPA and the State are considering a number of legal actions under other environmental laws.

Response category / Cleanup status code, October 1984: R

COMMENCEMENT BAY, SOUTH TACOMA CHANNEL
Tacoma, Washington

Conditions at listing (October 1981): The Commencement Bay, South Tacoma Channel Site covers 2.5 square miles in Tacoma, Washington. It has been an industrial center for more than 100 years. It includes the South Tacoma Swamp, the American Surplus Sales Co. site, and the Tacoma Municipal Landfill. Wells supplying drinking water to Tacoma are contaminated with chlorinated organic chemicals.

This is one of two Commencement Bay sites. They were considered one site when they were first proposed.

Status (July 1983): On March 24, 1982, a fire occurred at American Surplus. Using $215,000 in CERCLA emergency funds, EPA cleaned up the site, removing 645 drums of flammable solvents and other chemical wastes, as well as 400 cubic yards of debris. In April 1982, EPA signed a $100,000 Superfund State Contract with Washington to gather information for planning future remedial action in the South Tacoma Swamp. The work is scheduled to be completed in the third quarter of 1983. In April 1982, EPA signed a $228,000 Superfund State Contract for a remedial investigation of Municipal Wells 12A and 9A to determine the extent and type of contamination and a feasibility study to identify alternatives for remedial action. In March 1983, EPA authorized $1.3 million for construction of five aeration towers to remove organic solvents from Well 12A. The towers, which are essentially complete, improve the quality of the ground water so that it can be used for public drinking water or discharged to Commencement Bay. Pumping and treating Well 12A protect the remaining 12 wells in the field from contamination.

Response category / Cleanup status code, October 1984: R F / O

FRONTIER HARD CHROME, INC.
Vancouver, Washington

Conditions at listing (December 1982): The Frontier Hard Chrome, Inc., Site covers 2 acres in Vancouver, Washington. For a number of years in the middle to late 1970s, the company discharged chromium-contaminated waste water from electroplating operations into a "dry-well" on-site. There is no impervious layer between the dry well and ground water beneath. Chromium, including the more toxic hexavalent form, has been detected in an industrial and drinking water well about 0.3 miles from the site. Drinking water for 10,000 Vancouver residents is drawn from the same aquifer; the nearest city well is about 1 mile from the contaminated well.

Status (July 1983): The State has issued an order to Frontier to stop its discharge and to prepare a plan for remedial action. Monitoring wells are necessary to determine the extent of contamination of the aquifer.

EPA is preparing a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: R

FMC CORP. (Yakima Pit)
Yakima, Washington

Conditions at listing (December 1982): The FMC Corp. Site covers about 4 acres in Yakima, Washington. From 1952 to 1959, FMC and other firms disposed of agricultural pesticides in a "poison pit" on FMC's property. The unlined pit contains at least 44 cubic yards of mixed chemicals and residues, and the surrounding soil appears contaminated. A high potential exists for contamination of ground water, which supplies residential wells in the area.

Status (July 1983): Samples of soil were taken in June 1983. Results are expected soon. The State is working with FMC to determine what other actions are needed and to schedule them.

Response category / Cleanup status code, October 1984: D

GREENACRES LANDFILL
Spokane County, Washington

Conditions at listing (September 1983): The Greenacres Landfill covers 40 acres in Spokane County, Washington. The county operated the facility from 1968 to 1972. A drinking well immediately downgradient of the landfill is contaminated with chlorinated organic solvents, according to EPA data. This area is part of the Spokane Aquifer, which is the sole source of drinking water for 350,000 people in the region. Since 1980, EPA has collected data showing that the aquifer is becoming more contaminated. EPA plans additional sampling, especially in the immediate vicinity of the landfill.

Status (June 1984): EPA is planning a site investigation to define the problem more clearly. Several monitoring wells are scheduled for installation in the fall of 1984.

Response category / Cleanup status code, October 1984: D

HARBOR ISLAND (LEAD)
Seattle, Washington

Conditions at listing (December 1982): The Harbor Island (Lead) Site covers about 350 acres and is an industrial area in Seattle, Washington, at the month of the Duwamish Waterway where it empties into Elliott Bay. Air monitoring has recorded lead at levels several times the national standard established to protect human health. There is also concern that run-off has carried leadladen dust and accumulations of lead in the Harbor Island soil into nearby surface water and, by percolation, into ground water.

Status (July 1983): The City of Seattle has paved areas where concentrations of airborne lead are the highest. In addition, one company that is a source of airbone lead has taken measures to reduce fugitive lead-laden dust and emissions of lead from it process. The city is paving more areas and will then evaluate if additonal paving is still needed. More information is required to determine how much of the lead problem on Harbor Island is caused by current emissions from one or more industrial sources and how much by re-suspension of accumulated lead in soil.

EPA recently completed a draft remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. It will guide further actions at the site.

Response category / Cleanup status code, October 1984: D

KAISER ALUMINUM (MEAD WORKS)
Mead, Washington

Conditions at listing (December 1982): Kaiser Aluminum's Mead Works is located near the town of Mead in Spokane County, Washington. Cyanide, which originates from a 6-acre pile of spent pot liners on the plant property, was first noticed in several drinking water wells in 1978. The cyanide has contaminated an aquifer which supplies water to a tributary of the Little Spokane River. The company provided alternative water supplies to 27 homes with contaminated wells and paved the old pot-liner pile with asphalt. Since 1980, the pot liner wastes being generated have been placed in a specially constructed building.

Status (July 1983): Kaiser continues to take corrective actions, including the elimination of a retention pond. Water in the pond was infiltrating the contaminated soil beneath the storage pile and probably carrying cyanide into the aquifer. Kaiser reports that the elimination of the pond has significantly reduced the cyanide levels in certain test wells near the pile. Kaiser expects that improvements will continue and that the aquifer will eventually be cleaned by normal inflow of uncontaminated ground water.

No additional remedial actions are scheduled. Kaiser will continue monitoring for an extended period to determine if the cyanide is being contained effectively.

Response category / Cleanup status code, October 1984: V / O

LAKEWOOD SITE
Lakewood, Washington

Conditions at listing (December 1982): The Lakewood Site covers about 1 square mile, including a 1-acre laundry identified as a source, in Lakewood, Pierce County, Washington. In 1981, two major wells of the Lakewood Water District, which serves more than 10,000 people, were found to be contaminated by chlorinated organic compounds. The district closed the wells and used other uncontaminated wells to satisfy its needs.

Status (July 1983): EPA determine that the contaminants are components of degreasers, solvents, and other substances in common industrial use. EPA drilled 25 test wells in the Ponder's Corner-McChord Air Force Base area. Of the 25, only three were contaminated. A plume of contaminated ground water was found indicating one source and the direction from which the contaminants were coming. The State ordered a commerical dry cleaner to remove the contaminated soil from its property and cease discharging solvents. Future options include keeping the wells closed or treating and restoring them to use. Ground water monitoring in the area is expected to continue for the foreseeable future.

Response category / Cleanup status code, October 1984: R S / I

ional Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/"Superfund")

PESTICIDE LAB (YAKIMA)
Yakima, Washington

Conditions at listing (December 1982): The Pesticide Lab Site covers about 40 acres in Yakima, Washington. The site is leased by the U.S. Department of Agriculture (UDSA). Over the years, wastes from the pesticide storage/formulation/mixing facility at the Central Washington Experimental Laboratory of the USDA have been discharged into an on-site septic tank disposal system. As a result, pesticides have permeated the soils and may have contaminated ground water. The site is about 3 miles from the backup sources for Yakima's drinking water. Irrigation is the primary use of downstream surface water and ground water. Contaminants in the water could be taken up by crops.

Status (July 1983): The State and USDA are working together to determine what actions are needed and to prepare a schedule for doing them. USDA has started sampling the soil. Preliminary results are expected in late summer of 1983.

Response category / Cleanup status code, October 1984: D

QUEEN CITY FARMS
Maple Valley, Washington

Conditions at listing (September 1983): Queen City Farms, Inc., owns a site by the same name which covers 320 acres about 2.5 miles north of Maple Valley, Washington, and south of King County's Cedar Hill Landfill. The site includes a wooded area, Queen City Lake, six ponds, a gravel pit, an airstrip, and several residences. From about 1955 to the late 1960s, at least three of the six ponds were used for disposal of industrial wastes.

In November 1980, EPA detected significant concentrations of a number of heavy metals and organic chemicals in water and soil from the six ponds. In March 1981, EPA found very low concentrations of PCBs in five drinking wells in the vicinity of the ponds, but not the same type of PCBs found in the ponds. In June 1983, EPA was granted access to the site to drill test wells. Also in June, the company submitted to EPA a plan to investigate shallow ground water and take over the investigation EPA had started.

Status (June 1984): The company is beginning development of a second phase of the investigation at the site. This phase will include construction of several more deep wells to establish the gradient of the lower regional aquifer and determine if any contaminants are present in this aquifer. Work is also underway to develop a remedial investigation and focused feasibility study to determine the appropriate interim remedial measures to remove and/or contain the wastes in the three main ponds.

Response category / Cleanup status code, October 1984: F

WESTERN PROCESSING CO., INC.
Kent, Washington

Conditions at listing (July 1982): The Western Processing Co., Inc., Site covers 10 acres south of Seattle in Kent, Washington. The principal operations are recovery of solvents, neutralization of acidic and basic wastes, and precipitation of heavy metals. Other chemical and/or physical processes are used on a batch basis. Hazardous materials are stored directly on the ground and have entered the environment from leaks and spills. In the past, wastes were buried on-site as a means of disposal. In 1981 and again in 1982, EPA ordered Western Processing to meet the hazardous waste requirements of the Resource Conversation and Recovery Act. The company did not comply.

Status (July 1983): Recent EPA studies indicate that hazardous contaminants have migrated off-site in surface water and that soil and ground water beneath the site are grossly contaminated. As a result, in April 1983, EPA ordered the company to stop accepting or processing hazardous substances and to remedy the contamination. The company stated it was unable to undertake the remedy. EPA, using $1.5 million in CERCLA emergency funds, undertook measures to stabilize the site. Further investigation is now underway to more completely assess the extent of contamination on and off the site and to determine an appropriate remedy.

Response category / Cleanup status code, October 1984: V R F / O

FIKE CHEMICAL, INC.
Nitro, West Virginia

Conditions at listing (December 1982): The Fike Chemical, Inc., Site, in Nitro, Kanawha County, West Virginia, occupies about 12 acres next to the Kanawha River in an urban/industrial setting. The site contains an active chemical manufacturing facility, spray lagoons used for the evaporation of water from solvents, a drum burial area, and tank storage areas. Two of the lagoons have been filled. Contamination of ground water and air has been documented, and fires have occurred. Surface water contamination is suspected. An EPA suit against Fike resulted in a Consent Decree filed in November 1982.

Status (July 1983): Cleanup at the site is proceeding under the terms of the decree.

Response category / Cleanup status code, October 1984: V F / I

FOLLANSBEE SITE
Follansbee, West Virginia

Conditions at listing (December 1982): The Follansbee Site covers 26.5 acres on the Ohio River in Follansbee, West Virginia. Ground water under the site is contaminated with high concentrations of phenol. The site is owned by Koppers Co. and has been operating for over 50 years.

Status (July 1983): Koppers has installed a trench to intercept the contaminated ground water as it leaves the plant site. The ground water is pumped to the company's waste water treatment facility. The company has installed a second pump in an attempt to prevent the contaminated ground water from reaching the Ohio River, as well as to control the flow of ground water. The company and EPA are negotiating further cleanup at the site, and several possibilities are being considered.

Response category / Cleanup status code, October 1984: F

LEETOWN PESTICIDE
Leetown, West Virginia

Conditions at listing (December 1982): The Leetown Pesticide Site in Leetown, Jefferson County, West Virginia, may be a case of midnight dumping. A pile containing about 1,200 cubic yards of material is contaminated with several pesticides. Contamination of ground water, the only source of drinking water for the area, is the major concern. Possible contamination of Bells Spring, which supplies the Federal Fish Hatchery and National Fish Research Laboratory, is also of concern.

Status (July 1983): In April 1983, the contaminated pile was removed and properly disposed of by a potentially responsible party. The removal was conducted under the supervision of the State and EPA. Further testing is underway to check for possible residual contamination.

Response category / Cleanup status code, October 1984: R / O

WEST VIRGINIA ORDNANCE
Point Pleasant, West Virginia

Conditions at listing (October 1981): The West Virginia Ordnance Site in Point Pleasant, Mason County, West Virginia, was originally an 8,000-acre ordnance works run by the U.S. Army during World War II. Presently, the State owns and operates the land as the McClintic Wildlife Refuge, open for public hunting and fishing. Portions of the site that contain buried lines associated with the manufacturing of trinitrotoluene (TNT) may be filled partially with crystalline TNT. Surface water (Pond 13) is contaminated with dinitrotoluene (DNT), a chemical precursor of TNT.

This is the top priority site in West Virginia.

Status (July 1983): EPA recently completed a remedial plan outlining the investigations needed to determine the full extent of cleanup required at the site. Initial remedial measures recommended for this site include posting and fencing of open manholes leading to the buried lines and fencing of Pond 13.

Response category / Cleanup status code, October 1984: V / O

CITY DISPOSAL CORP. LANDFILL
Dunn, Wisconsin

Conditions at listing (September 1983): City Disposal Corp. (owned by Waste Management of Wisconsin, Inc.) filled about 35 acres of a 58-acre landfill in the Town of Dunn, Dane County, Wisconsin, from 1969 to 1978. In a separate area, the operator buried an estimated 5,000 to 10,000 drums of industrial wastes (including solvents from the plastic fabrication industry and a water-lube oil mixture) and smaller quantities of paint waste. The site is less than 400 feet from a branch of Bad Fish Creek, and there is a potential to contaminate ground water. The landfill, now closed and covered, is unlined and rests on silty soils.

Status (June 1984): EPA is negotiating for cleanup of the site by a party potentially responsible for wastes associated with the site.

Response category / Cleanup status code, October 1984: D

DELAVAN MUNICIPAL WELL NO. 4
Delavan, Wisconsin

Conditions at listing (September 1983): Municipal Well No. 4 supplying Delavan, Walworth County, Wisconsin, is contaminated with traces of trichloroethylene and smaller amounts of three other solvents. The city closed the well in July 1982, when it discovered the contamination. Sta-Rite Industries, located less than 2 miles from the well, is working with the city to determine if the contamination may come from a buried tank in which the company formerly stored waste solvents.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

ational Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/"Superfund")

EAU CLAIRE MUNICIPAL WELL FIELD
Eau Claire, Wisconsin

Conditions at listing (September 1983): The Municipal Well Field serving residents of Eau Claire, Eau Claire County, Wisconsin, is contaminated with trace amounts of four chlorinated organic solvents, including trichloroethylene (TCE). The well field serves over 45,000 persons. It is just north of the middle of town and near the airport and a variety of industries. The source and extent of the contamination are unknown.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

JANESVILLE ASH BEDS
Janesville, Wisconsin

Conditions at listing (September 1983): The City of Janesville, Wisconsin, owns and operates a 5.3-acre ash filtration bed facility just west of its old landfill. The first bed was opened in April 1974. The bottom of each bed is covered with fly ash, then industrial sludges, including paint and clarifier sludges, plating wastes, and petrochemicals (during first 6 months only) are added. In theory, the sludge dries on top of the ash bed. The sludge-ash mixture is periodically cleaned out and disposed of, first at its old landfill (which closed in 1978) and later at its new landfill. From 1.5 million to 3 million gallons (7,500 to 15,000 cubic yards) of industrial sludges are accepted annually. Limited amounts of leachate are collected to monitor the facility's performance.

In February 1980, the State acted to require the city to seek a license or close the facility under the State's new hazardous waste code. In October 1982, the city constructed three clay-lined ash beds to collect leachate but must also satisfy other conditions to obtain a State interim license to continue to operate for an additional 2 years. The city has started a comprehensive investigation of soils and ground water. Preliminary results indicate both have been contaminated. All data available will be evaluted to determine if additional remedial action is necessary.

Status (June 1984): EPA has started a search for parties potentially responsible for wastes associated with the site.

Response category / Cleanup status code, October 1984: D

ional Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

JANESVILLE OLD LANDFILL
Janesville, Wisconsin

Conditions at listing (September 1983): The old Janesville Landfill in Janesville, Wisconsin, was owned and operated by the city. From 1950 to 1978, the site, a 40-acre unlined gravel pit, accepted both municipal and industrial wastes. Prior to 1974, the site received some General Motors (GM) wastes (paints, petrochemicals, solvents, etc.), although it appears that most GM wastes went elsewhere. In 1974, when Janesville started to operate an ash bed facility for disposal of industrial sludges, the site also received a sludge-ash mixture generated when the ash beds were cleaned out. As much as 12 million gallons (60,000 cubic yards) of industrial sludges have been applied to the ash beds; the quantity of sludge-ash mixture received at the landfill was smaller because of the water lost. Ground water under the site is contaminated with chromium and lead, according to analyses conducted by the city.

In late 1978, the county constructed an 18.2-acre landfill, with a 5-foot clay liner and leachate collection system, adjacent to the old landfill. It is still active.

Status (June 1984): The site has been closed and capped, and ground water is being monitored. EPA has initiated a search for parties potentially responsible for wastes associated with the site.

Response category / Cleanup status code, October 1984: D

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/"Superfund")

KOHLER CO. LANDFILL
Kohler, Wisconsin

Conditions at listing (September 1983): The Kohler Co. Landfill in Kohler, Wisconsin, is within 300 feet of the Sheyboygan River. In August 1976, the State licensed 40 acres for disposal of industrial wastes. Kohler also operates two 4-million-gallon lagoons west of the landfill. The lagoons reduce the total suspended solids in the company's process waste water before it is discharged to the Sheboygan River.

In 1977 and in 1981, sludges (14,500 cubic yards and 21,413 cubic yards respectively) from the lagoons were buried at the landfill. In addition, the landfill received foundry sand, municipal waste residues, oils, and other wastes from the Kohler foundry.

Ground water at the landfill is apparently contaminated with chromium, cadmium, and phenols from past landfilling operations, according to data collected by the State.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

LAUER I SANITARY LANDFILL
Menomonee Falls, Wisconsin

Conditions at listing (September 1983): The Lauer I Sanitary Landfill covers 56 acres in Menomonee Falls, Waukesha County, Wisconsin. From the mid 1950s to 1972, the privately-owned landfill accepted a variety of municipal and industrial wastes. Ground water beneath the site is shallow.

In 1973-74, State inspections revealed holes in the berm around the site, allowing leachate from a collection pond to escape into a drainage ditch that drains into the Menomonee River. In 1974, the State issued an order for the owner to close the site properly. In 1981, the owner installed an underground wall of clay materials between the landfill and the pond to stem the flow of leachate. Presently, leachate accumulating behind the cutoff wall is going to a municipal waste water treatment plant. Although the landfill has been covered and seeded for recreational use, leachate continues to threaten ground water and nearby surface waters, according to samples collected by the company and inspections by the State.

Status (June 1984): The State continues to work with the site owner to provide for complete and proper closure of the site and resolution of the problem.

Response category / Cleanup status code, October 1984: D

LEMBERGER TRANSPORT & RECYCLING, INC.
Franklin Township, Wisconsin

Conditions at listing (September 1983): From 1969 to 1976, Lemberger Transport & Recycling, Inc., operated an unlined landfill in Franklin Township, Manitowoc County, Wisconsin. From 800,000 to 1 million gallons of tars and paint sludges were buried at the site. Heavy metals (mainly cadmium and lead) and phenols have leached into ground water, according to analyses conducted by the State. Large quantities of aluminum dust are also buried nearby. Ground water connected to the site supplies water for more than 900 people within 3 miles of the site.

The owner of the site farms property adjoining the site and has plowed portions of the site, exposing bulk wastes and drums.

In 1982, the State signed a Consent Order with the company requiring a report on site conditions, extent of ground water contamination, and preliminary remedial actions.

Status (June 1984): The company has not fully complied with the Consent Order, so the State has referred the matter to the State Attorney General's Office for action.

EPA is conducting a search for parties potentially responsible for wastes associated with the site.

Response category / Cleanup status code, October 1984: D

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MASTER DISPOSAL SERVICE, INC., LANDFILL
Brookfield, Wisconsin

Conditions at listing (September 1983): Master Disposal Service, Inc., operated a 40-acre landfill on the western edge of Brookfield, Waukehsa County, Wisconsin. The site was licensed by the State to receive wastes in August 1977. Between 1962 and January 1982, the company filled a 26-acre wetland near the banks of the Fox River with in excess of 1.5 million gallons of industrial wastes -- solvents, paints, adhesives, oils, and foundry wastes. No wastes have been accepted for about 2 years.

State sampling established that ground water near the site is contaminated by chromium, lead, phenols, and PCBs. A ditch drains from the site into the Fox River.

In 1977, the State signed a Stipulated Agreement requiring the company to develop and implement a proper site abandonment plan.

Status (June 1984): Wisconsin's Department of Natural Resources and the Attorney General's Office have been dealing with the company to bring it into compliance with the Stipulated Agreement.

EPA is conducting a search for parties potentially responsible for wastes associated with the site.

Response category / Cleanup status code, October 1984: D

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MID-STATE DISPOSAL, INC., LANDFILL
Cleveland Township, Wisconsin

Conditions at listing (September 1983): The Mid-State Disposal, Inc., Site covers about 160 acres in Cleveland Township, Marathon County, Wisconsin. From 1971 to 1979, the company owned and operated a landfill and three lagoons on the site; the area involved is about 30 acres. Between 1974 and 1976, the company buried about 4,800 tons of asbestos wastes from a fire-door manufacturer in trenches where ground water is shallow. The lagoons were used for disposal of significant amounts of paper mill sludges.

The site has a history of overflowing lagoons, run-off to surface water, and seepage. When the site closed, the landfill areas were covered with a clay cap, graded, and seeded; the lagoons were covered with a fabric liner and gravel layer; and a leachate collection system was installed. The system is overflowing, and leachate continues to discharge from the site, according to inspections conducted by the State.

In 1975, the State issued an order requiring the company to properly close the landfill. In 1976, when the company failed to comply, the State went to court. In 1983, the State terminated its legal action because Mid-State had no assets.

Status (June 1984): EPA is conducting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Response category / Cleanup status code, October 1984: R

MOSS-AMERICAN CO., INC. (KERR-MCGEE OIL CO.)
Milwaukee, Wisconsin

Conditions at listing (September 1983): From 1946 until 1976, Moss-American Co., Inc., a division of Kerr-McGee Oil Co., treated railroad ties, telephone poles, and building materials with preservatives such as creosote on a 90-acre site in Milwaukee, Wisconsin. Creosote-soaked logs were stored and coated at several areas in the plant. As a result, creosote and other coal tar distillates contaminated the site. The old factory buildings were demolished in 1978, and creosote sludge and the most contaminated soils were excavated and sent to a disposal site in Illinois. Creosote-like compounds from past operations, however, continue to contaminate surface soil, ground water, and river sediments near the site, according to analyses conducted by EPA.

The site, a portion of which is owned by the Milwaukee County Parks Commission, is adjacent to the Little Menomonee River.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

MUSKEGO SANITARY LANDFILL
Muskego, Wisconsin

Conditions at listing (September 1983): The privately-owned Muskego Sanitary Landfill covers 56 acres in Muskego in southeastern Waukesha County, Wisconsin. An active landfill operated by Waste Management of Wisconsin, Inc., and a rendering plant are to the north of the property. The site was closed and covered in 1977. Files indicate that prior to the early 1970s, the landfill accepted some hazardous wastes, including paints and oils. After 1973, so far as is presently known, the landfill accepted only municipal refuse. The present operator has detected lead and zinc in on-site monitoring wells and nearby private wells. The State verified the presence of only the zinc in private wells.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

NORTHERN ENGRAVING CO.
Sparta, Wisconsin

Conditions at listing (September 1983): Northern Engraving Co. owned and operated an acid pit and a lagoon from the early 1960s until 1983. The site is on the southwestern edge of Sparta, Monroe County, Wisconsin. The company disposed of wastes from its metal-finishing operations on the site. The lagoon lies in sandy soil, intercepts the water table, and lies less than 500 feet from the La Crosse River, which is used for recreational activities. About 4,400 cubic yards of sludges containing heavy metals, cyanides, and arsenic were deposited in the pit and lagoon, which were unlined and allowed wastes to seep into ground water. The pit and lagoon were abandoned in the late 1970s. Sludge from the lagoon was buried on-site on at least one occasion.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/"Superfund")

OCONOMOWOC ELECTROPLATING CO., INC.
Ashippin, Wisconsin

Conditions at listing (September 1983): Oconomowoc Electroplating Co., Inc., operates an electroplating shop in Ashippin, Dodge County, Wisconsin. In 1972, two waste water settling ponds were constructed on-site, each about 20 by 40 feet and up to 8 feet deep. Metal-bearing sludges have accumulated in the ponds and may have been removed at infrequent intervals through the early 1970s. During this same period, the firm constructed a waste water treatment plant. Inefficient operation of the ponds and the treatment plant, as well as discharges of untreated waste water, have resulted in an accumulation of metal sludge in a wetland adjacent to Davy Creek, according to inspections conducted by the State. The creek is a tributary to the Rock River about 1 mile downstream. The extent and composition of this accumulated sludge have not been determined.

Plant operations may also have contaminated ground water in the area. Plating wastes, which typically contain nickel, chromium, copper, zinc, cadmium, tin, and cyanide, have eaten through the concrete waste troughs in the plant floor and have also seeped out of the ground near the plant walls. Drums of wastes are leaking on-site, and sludges have spilled, according to the State.

Ground water in the area is shallow and supplies water for all inhabitants in the immediate area.

In March 1981, the State court ordered the company to restrict its discharge of metals into the wetlands.

Status (June 1984): In December 1983, the State ruled that the company was in contempt. At present, the State and the company are negotiating a settlement that would include improved equipment for treating the company's wastes.

Response category / Cleanup status code, October 1984: D

OMEGA HILLS NORTH LANDFILL
Germantown, Wisconsin

Conditions at listing (September 1983): Waste Management of Wisconsin, Inc., owns and operates the 83-acre Omega Hills North Landfill in Germantown, Wisconsin, in the extreme southeastern corner of Washington County. An adjoining 83-acre parcel (in Waukesha County) is the site of a proposed landfill. The Omega Hills North Landfill is one of the largest landfills in Wisconsin, accepting 2,000 tons per day of mixed municipal and industrial refuse (about 550,000 tons of wastes annually). From 1977 to 1982, the site was licensed by the State to dispose of hazardous wastes, including liquids. More than 12 million gallons of liquids were accepted annually. The site stopped accepting hazardous wastes in November 1982 and liquid wastes in April 1983. The disposal of large volumes of liquid wastes, precipitation, and the failure to remove and treat adequate amounts of leachate have resulted in the accumulation of more than 200 million gallons of liquid in the landfill, according to inspections conducted by the State.

Layers of sand that intersect the bottom and sides of the landfill, after becoming saturated, serve as conduits, transmitting liquid wastes and leachate to surrounding ground water. Monitoring wells around the landfill show that ground water is contaminated, according to data collected by the State. Some nearby wells tap the same aquifer.

Status (June 1984): The State is working with the owner to resolve the problems at the site.

Response category / Cleanup status code, October 1984: D

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/"Superfund")

ONALASKA MUNICIPAL LANDFILL
Onalaska, Wisconsin

Conditions at listing (September 1983): The Town of Onalaska owns and operated a landfill in Onalaska, about 10 miles north of La Crosse, La Crosse County, Wisconsin, from 1969 to 1980. The site is within 500 feet of the Black River, near where it meets the Mississippi River. The landfill accepted residential, commercial, and industrial wastes. The site operators buried various laboratory solvents from 1971 to 1974 and significant quantities of naphtha and PTL-1009, a synthetic lubricant, from 1975 to 1978. The equivalent of 2,500 drums of solvent wastes are estimated to have been disposed on-site. Soils underneath the unlined disposal site are highly permeable, and ground water is believed to rise into the waste during part of the year. As a result, although the landfill was covered in 1982, waste products are leaching through the soil. Sampling by the State established that ground water and a nearby private well are contaminated with various organic compounds.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

SCHMALZ DUMP
Harrison, Wisconsin

Conditions at listing (September 1983): The Schmalz Dump is a privately-owned and unauthorized site in a 0.7-acre wetland in Harrison, Calumet County, Wisconsin. The wetland empties into Lake Winnebago 0.3 miles downstream. A municipal water supply intake for the City of Appleton is within 2 miles of the site.

While in use from 1971 to 1979, the site accepted demolition debris and power plant ash. In late 1978 and early 1979, 2,500 cubic yards of demolition waste containing PCBs were dumped. EPA has documented up to 1,600 parts per million PCBs in soil and demolition waste at the site. PCBs have not been shown to he migrating off-site. However, the high concentrations of PCBs could be a threat to nearby residential wells, surface waters, and the water supply intake.

Status (June 1984): EPA plans to collect samples near the site to determine if PCBs are migrating off-site.

Response category / Cleanup status code, Octoher 1984: D

SCRAP PROCESSING CO., INC.
Medford, Wisconsin

Conditions at listing (September 1983): Scrap Processing Co., Inc., operated a salvage yard on a 2-acre site in Medford, Taylor County, Wisconsin. Between 1955 and 1974, the company cracked lead/acid batteries on-site to reclaim lead. The equivalent of 399,000 gallons of acid wastes contaminated with lead were contained in a small unlined pond. The pond has intermittently overflowed into the nearby Black River, contaminating it with lead, cadmium, copper, and acids, according to analyses conducted by the State. Acid wastes have seeped into the soil and can potentially contaminate ground water. The area between the pond and the river is almost devoid of vegetation.

Status (June 1984): As a result of an enforcement action brought by the State, the company has been ordered to clean up the site.

Response category / Cleanup status code, October 1984: S

WASTE RESEARCH & RECLAMATION CO.
Eau Claire, Wisconsin

Conditions at listing (September 1983): Waste Research & Reclamation Co. has recycled oil and solvents from industrial sources at a 19-acre site in Eau Claire, Wisconsin, since 1975. Hazardous wastes were also treated and stored on the site, which is privately owned and operated. It is located about 0.5 miles east of Lowes Creek, a tributary of the Chippewa River. The techniques used to handle and store drums allowed wastes to spill on the site. Run-off from waste processing has been collected in unlined impoundments. Organic solvents from the site contaminate ground water, according to analyses conducted by the State, but to date no residential wells are contaminated.

In June 1980, the State ordered the company to monitor the ground water. The company submitted a technical response, which the State evaluated.

Status (June 1984): In February 1983, the State signed a Consent Order with the company for a long-term monitoring program. The results of the technical investigation are due later this year.

Response category / Cleanup status code, October 1984: D

National Priorities List Site

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/"Superfund")

WHEELER PIT
Janesville, Wisconsin

Conditions at listing (September 1983): The Wheeler Pit covers 4 acres near Janesville, Wisconsin. The unlined gravel pit, owned by the Chicago, Milwaukee, St. Paul & Pacific Railroad, is about 30 feet above ground water in 200 feet of permeable soils. Wastes were accepted from 1956 until 1974. From 1960 to 1974, General Motors (GM) used the site to dispose of paint sludges and fly ash from its Janesville auto assembly plant. GM indicates that about 22.3 million gallons of organic and inorganic sludges containing solvents and heavy metals were disposed of in the gravel pit. It was closed, covered, regraded, and seeded in 1975.

Sampling by GM established that ground water under the site is contaminated with arsenic, chromium, zinc, and barium. Six private and industrial wells for drinking water in the area are contaminated.

Status (June 1984): EPA is considering various alternatives for the site.

Response category / Cleanup status code, October 1984: D

BAXTER/UNION PACIFIC TIE TREATING
Laramie, Wyoming

Conditions at listing (December 1982): The Baxter/Union Pacific Tie Treating Facility covers 100 acres just southwest of Laramie, Wyoming. It has been operating since the 1880s. The site includes unlined surface impoundments that contain approximately 1 million cubic feet of waste. Pollutants, including pentachlorophenol, benzene, naphthalene, toluene, and phenol, have migrated from the ponds, contaminating the shallow ground water beneath the site and the Laramie River.

Status (July 1983): The State and both companies agreed to conduct investigations to define the contamination problem. The work is scheduled to be completed in the fourth quarter of 1983.

Response category / Cleanup status code, October 1984: D